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RISING POWERS AND ECONOMIC CRISIS IN THE EURO AREA

Ferdi De Ville and Mattias Vermeiren

Global Reordering

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In loving memory of Brigitte Buyse (1958-2015)

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Abbreviations

AD	Anti-dumping
BIC	Brazil, India, China
CC	Comparative capitalism
CME	Coordinated market economy
CPE	Comparative political economy
DQP	Diversified quality production
EA	Euro area
EC	European Commission
ECB	European Central Bank
EMDC	Emerging markets and developing countries
EME	Emerging market economy
EMU	Economic and Monetary Union
GDP	Gross domestic product
GFC	Global financial crisis
GIPS	Greece, Ireland, Portugal, Spain
HS	Harmonised system
IMF	International Monetary Fund
IPE	International political economy
LME	Liberal market economy
MIP	Macroeconomic imbalances procedure
MME	Mixed-market economy
MTCI	Merchandise trade correlation index
NEER	Nominal effective exchange rate
OCA	Optimal currency area
OECD	Organisation for Economic Co-operation and Development
OMT	Outright monetary transactions
PBoC	People's Bank of China

PPI	Producer price index
QE	Quantitative easing
RCA	Revealed comparative advantage
R&D	Research and development
REER	Real effective exchange rate
SME	Small and medium-sized enterprise
UK	United Kingdom
ULC	Unit labor costs
US	United States
VET	Vocational education and training
VoC	Varieties of capitalism
WRUV	Weighted relative unit value
WTO	World Trade Organization

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CHAPTER 1

Introduction

Abstract In response to the euro crisis, the euro area has adopted an export-led recovery and growth strategy. With Germany as the example to be emulated, and its labor market reforms of the past decade in particular, especially the crisis-ridden member states in the south are instructed to improve their cost competitiveness in order to accumulate export surpluses with which to repay their debt. Emerging economies as the global growth engines of the coming decades are identified as the markets that should absorb these trade surpluses. How realistic are these objectives and the instruments that are identified to attain them? Are the right lessons drawn from the German example? This introduction lays out this problématique and introduces the main arguments, theoretical framework and research design of the book.

> *When the doomsayers say that Europe will struggle to compete in a globalised economy, I point to Germany .... Based on competitiveness, innovation and knowledge, German companies show how we can continue to succeed in a globalised economy.*
>
> Karel De Gucht (2010)

> *A part of the growth that Europe needs to generate over the next decade will need to come from the emerging economies as their middle classes develop and import goods and services in which the European Union has a comparative advantage.*
>
> European Commission (2010: 22)

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The quote above from Karel De Gucht, former European Commissioner for Trade, has been one of the reasons why we have started thinking about the subject of this book. Similar to many statements by political actors in Europe in the past years, De Gucht argues here that the way out of the crisis and onto a future growth path for Europe is by *going German*; that is, accumulating trade surpluses and pursuing an export-led growth strategy. It is a post-crisis strategy that is being pursued in the euro area (EA) today and most radically for Southern Europe, where austerity and structural (mainly labor market) reforms are applied with the aim of making those countries more competitive by lowering their labor costs so that they are able to run trade and budget surpluses with which to repay their debts and restore their general economic health.

But how feasible is it for EA economies, especially in the crisis-hit countries in the south (Greece, Italy, Portugal and Spain[1]), to become as competitive in the globalized economy as Germany by following this route? What is their past record? How have the crisis-ridden countries, or alternatively called the 'periphery' of the EA, performed in international trade before the crisis? Can, perhaps, their current account and competitiveness problems that became so apparent with the outbreak of the global crisis partly be ascribed to extra-EA trade deficits? And if so, which role did competition from emerging markets play? Should their problems be understood primarily as related to price competitiveness and labor costs? Or do they rather not produce the right goods of high quality that are in dynamic demand by the developing industries and middle classes of emerging economies, singled out in official rhetoric as the future growth driver in the quotes at the beginning of this chapter? To what extent are these considerations taken into account in today's crisis response policies in different areas such as trade, monetary and industrial policies? Are, in other words, the right lessons drawn from the German success?

We were puzzled by the relative academic silence on these issues. These questions have hardly been dealt with in our disciplines, International Political Economy (IPE) and Comparative Political Economy (CPE) and European Studies. Analyses of the euro crisis from such perspectives have tended to focus on *internal*, endogenous explanations. Asymmetrical dynamics after the introduction of the single currency *within the EA* are seen as the main causes of the crisis. One strand (the 'fiscal camp' that sees the crisis mainly as a budgetary phenomenon; Johnston et al. 2014: 3–4) focuses on the endogenous dynamics that led the Economic and

Monetary Union (EMU) periphery's governments to borrow too much after the introduction of the euro and the convergence of interest rates. Others (the 'competitiveness camp' that sees the EA crisis as primarily a competitiveness problem) focus on *internal* trade and capital account imbalances, whereby deficits of the south are merely seen as the reverse side of the surpluses of the north, induced by divergent unit labor cost trends, as the main sources of the EA crisis. As we explain in detail in Chap. 2, these imbalances are further explained as consequences of the EA's macroeconomic policies, and the European Central Bank's (ECB) one-size-fits-none monetary policies in particular. Scholars of CPE have drawn attention to the interaction of the ECB's monetary policy with different national wage-setting mechanisms in the member states, which resulted in losses in price competitiveness for the south.

We will go beyond these traditional explanations in a twofold way. *First*, we overcome the narrow focus on intra-regional imbalances by showing that the north and south of the EA have also recorded very different trade balances *outside* of the region. *Second*, we argue that these different internal and external trade performances cannot be explained by an exclusive focus on structural (macroeconomic) dynamics of the EMU and/or wage dynamics in the member states. We hold that dynamics of non-price competitiveness—the quality differentiation of production and global demand and competition for products in which the different member states are specialized—have played a key role in these trade imbalances. In turn, we contend that the divergence of non-price competitiveness between the northern and southern Eurozone countries have been shaped by the divergence in skill regimes and production structures. Our analysis will reveal the contradictions in the current explanations of the euro crisis and prescriptions for recovery, which consider emerging economies to be part of the solution rather than scrutinizing their potential role in the challenges faced by the southern countries. Not only in the literature on EMU and the euro crisis these questions have been largely overlooked. Also in the literature on EU external trade policy, the EU is uncritically treated as one single, well-performing 'bloc', without profound interrogation of possible differences in trade performance between member states. This book aims to fill at once these hiatuses in both the political economy of the euro crisis literature and the IPE and European Studies literature on EU trade policy. It builds on an article published by *Comparative European Politics* (De Ville and Vermeiren 2014), which was, to our knowledge,

the first attempt to apply (and go beyond) the insights of the varieties of capitalism (VoC) literature to EU trade politics.

We were evenly surprised that the potential significant role of extra-EA imbalances in destabilizing the EA (and the world economy) receives so little attention among policymakers in the region. European politicians and officials seem unperturbed not only by the (scant) academic but also by official international criticism of the EA's export-led, mercantilist growth strategy after the crisis. During the past couple of years, the US government has frequently complained about Germany's weak domestic demand growth and dependence on exports for having instilled a deflationary bias both for the EA and the world economy, urging EA countries with large and persistent surpluses to reflate their economies in order to ease the adjustment pressures. This and similar criticism by, among others, the International Monetary Fund (IMF) seems to fall on deaf ears in Germany. The Annual Economic Report 2014–2015 by the German Council of Economic Experts (2015: 1) reflects the persistent consensus in Germany: 'The criticism of Germany expressed by countries outside the euro area is not convincing.' Nevertheless, in consecutive in-depth reviews as part of the Macroeconomic Imbalances Procedure (MIP) of the European Semester, even the European Commission (EC) (e.g., 2014a) concluded that Germany's persistently high current account surplus risks constraining trade rebalancing by the deficit countries. Still, the solutions proposed by the Commission have focused on demand-side policies (boosting investment and domestic consumption) and supply-side reforms (further liberalization of the services sector) in surplus countries; rather than proposing reforms and real financial support to enhance the productivity, quality and structure of the southern EA economies, its proposals for the latter countries do not go beyond the prescriptions incorporated in the Adjustment Programs and remain overly focused on fiscal austerity and labor market flexibilization.

It is even more puzzling that the euro crisis has hardly been linked to changing trade trends in the rest of the world and the rise of emerging powers in particular. Indeed, one of the most significant changes in the global monetary system—the introduction of the euro—coincided with one of the most significant structural transformations in the global economy—the rise of the emerging economies. At the same time as the first euro's were being coined in 2001, Jim O'Neill from Goldman Sachs coined the term 'BRICs' to refer to the structural shift associated with the rise of Brazil, Russia, India and China. In the meantime, Russia has lost

much of its once perceived economic glory so that more and more observers leave out the 'R' from the acronym and talk about the BICs as the main emerging economies. Between 1999 and 2013 (the period analyzed in this book), average annual growth in exports was 13.3% for Brazil, 19.8% for China and 18.6% for India, with average yearly growths in imports showing a very similar trend.[2] *We will analyze in this book how this enormous transformation of the global economy has interacted with the biggest monetary overhaul in history, the introduction of the euro*. Our conclusion will be that the first significantly aggravated the imbalances set in motion by the second, and that this has confronted the periphery with both exogenous and endogenous economic problems that can be called (with a cliché, we must admit) a 'perfect storm'. Our analysis shows that the current crisis response in the euro area is insufficient in the short term and unsustainable in the longer term. A more effective and equitable response would imply a balanced adjustment between the north (through reflation) and the south (through more moderate deflation) as well as, crucially, a public investment program for the south that would allow the peripheral member states to escape their stuck-in-the-middle positions and become economies of higher value added that are better positioned to thrive in the globalized economy.

Indeed, the rise of the BICs naturally represents both threats and opportunities for other countries in the world. As highlighted in the quote from Europe 2020 at the beginning of this introduction, their emerging middle classes' appetite for fancy 'western' consumer goods and their industries' need of high-quality capital goods mean export opportunities for industrialized economies' firms involved in production of these. Moreover, their cheap exports increase the purchasing power of European consumers and represent low-cost input factors for European producers. On the contrary, their specialization in cheap consumer goods, and their rapid ascent up the value chain, represents potential competition for other sectors of developed economies. This is one of the main issues we delve into in the next chapters.

A Note on Data, Methods and Design Choices

This book relies on a combination of synthesis of secondary literature, analysis of primary data and expert interviews. The objective of this book is essentially modest. We do not claim to offer *the* explanation for the euro crisis that has been overlooked by each and every expert so far. Instead,

we argue that, especially within our academic disciplines, but importantly also to a large extent in policy circles, too little attention has been given to the role of extra-regional imbalances in the run-up to the crisis and their origins in different skill regimes and path-dependent economic structures in the member states. Partly as a consequence of this neglect, there has also been insufficient critical reflection on the feasibility of the EA's post-crisis growth strategy, which is largely based on imposing an 'internal devaluation' of labor costs on the southern countries in order to shift their trade balance from a deficit to a surplus. We critically describe, analyze and explain pre-crisis and post-crisis dynamics in extra-regional trade imbalances by bringing together different literatures in an, we believe, innovative and interdisciplinary way: insights from economics, political economy, international relations and European Studies on, inter alia, the euro crisis, monetary relations, trade politics, varieties of capitalism and the rise of the BICs are integrated.

We provide and analyze primary data on trade balances and structures of the EA member states and the BIC countries. These data and the patterns we discern in them are presented as stylized facts and should be interpreted with the necessary caution. We will try to clearly spell out what the data we have used and generated can and cannot tell us, and will compare our findings with other literature that sometimes uses other data sources and/or methods of analysis. Finally, we have done 30 expert interviews for this book. These interviews serve multiple purposes: we have applied them as an instrument for triangulating our findings and interpretations; we have used them as a source of information on national positions and policies vis-à-vis the issue of our study; and, finally, we have drawn on those interviews to get a better insight into how experts and policymakers in the EA (from within administrations and central banks at the national and supranational level as well as representatives of social partners) perceive our *problématique*.

There are a couple of choices we have made while developing this study that merit explanation. *First*, in order to assess how euro membership affected the competitiveness of the EA countries and mediated the effects of the rise of the BICs, we focus in this book on countries that were member states of the EA in 2001—the year the euro was physically introduced. As such, we have left out the central and eastern European countries, which only later adopted the euro. We also decided to leave Ireland and Luxemburg out of our in-depth analysis. The reason is that we structure our analysis along two ideal types of capitalist economies (introduced in

the next chapter), coordinated market economies (CMEs) and mixed-market economies (MMEs), in the EA and that Ireland belongs to none of both but is often considered a liberal market economy (LME)—albeit one that deviates more substantially from this ideal type than the USA or the UK. The Irish case is also somehow different from the troubles of the other 'periphery' countries, as it is seen to have been hit by a more traditional private debt and banking crisis that deteriorated, however, because of dynamics and decisions within EMU (Eichengreen 2015). Luxemburg has been incorporated in the CME group when we use aggregate figures, but we do not make individual analyses for this very small and a-typical service-oriented economy.

Second, we have decided, similarly to many other studies in the comparative capitalism (CC) literature, to focus our analysis of trade performances on trade in goods, excluding trade in services. While services of course represent the majority of value added in contemporary economies, industry accounts for over 80% of Europe's exports as well as of private research and innovation (European Commission 2014b: 1), two areas that are central to our analysis.[3] Moreover, although improvement has certainly been made over the past two decades, data on trade in services are still imperfect, hindering the kind of detailed, disaggregated analysis of trade in goods we perform in this book.

Third, we look at nominal trade flows (exports and imports) and trade balances without taking into account the use of inputs in exports and imports that are increasingly significant in our interconnected world with global value chains. Since a number of years, there have been efforts by public international institutions as the Organisation for Economic Co-operation and Development (OECD) and the World Trade Organization (WTO), as well as some research centers, to develop 'trade in value added' indicators that discount imports and exports of inputs in trade data. However, as this is still work in progress and data are also not as reliably and exhaustively available as for nominal trade flows, we have decided to make use of the latter. *Finally*, as a consequence of our research design, theoretical perspective and data limitations, our analysis is also prone to 'methodological nationalism'. As is common in the varieties of capitalism literature, we will look at economic outcomes for member states of the EA and will explain these by referring to national-level structural-institutional causes. However, we are well aware (as economic geographers have long pointed out with reference to, e.g., the 'Blue Banana'-like shape of rich regions that span from Northwest England to the North of Spain) that there are

important regional differences within member states in terms of both economic performance and industrial characteristics.[4]

This book is structured as follows. In Chap. 2, we look at how the euro crisis has been explained in most macroeconomic and political economy literature so far. With regard to the latter, we discuss in particular the varieties of capitalism perspective. We build our own analysis on this approach but go beyond the current fixation of this strand on internal imbalances and labor costs and wage bargaining institutions. In this chapter, we also discuss theoretically how the divergence among market economies in the EA interacts with the rise of emerging economies and how this is negatively (or insufficiently) mediated by E(M)U monetary and trade policies. Chapter 3 discusses in a still abstract way the rise of the BICs and how this has produced an asymmetric shock to the EA. The next two chapters then proceed to zoom in on the concrete effects of the interaction between the changing global economy and varieties of capitalism on the different EA member states individually. The final chapter looks at the policy response, or lack thereof, to the problem we outlined in the book and will discuss alternatives to the current internal devaluation/export-led growth strategies, which not only risk reinforcing (economic, social and political) divergence within the EA but might also lead to increasing frictions between the structural surplus region that the EA is ever more becoming and the rest of the world.

Notes

1. Below, we explain why we do not include Ireland in our analysis in this book.
2. Average yearly imports for Brazil 13.4%, for China 19.4% and for India 18.8%. All trade data in this book are based on UN Comtrade, unless specified otherwise.
3. We are conscious of the fact that we might thereby underestimate the competitiveness of some southern EA member states, as the Spanish services sector, especially in banking and telecommunications, is more internationally competitive and produces more high value-added than manufacturing, and all MMEs are competitive in tourism.
4. Examples of regions that perform significantly better than their country's average include the industrial districts in Northern Italy or the Basque Country in Spain.

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CHAPTER 2

External Imbalances and Varieties of Capitalism in the Euro Area

Abstract This chapter discusses the main diagnoses of the euro crisis and the consequent remedies in the macroeconomics and comparative political economy literature. It is argued that both approaches view the euro crisis as the result of endogenous processes. The defects of the Economic and Monetary Union (EMU) leading to one-size-fits-none monetary policy at the supranational level and divergent domestic capabilities to keep wages in check are argued to have resulted in inflation differentials between the north and south of the euro area and consequent internal trade imbalances. The varieties of capitalism literature explains why certain member states (coordinated market economies) have been better equipped to retain and strenghten their competitiveness and trade balances than others (mixed-market economies) based mainly on the characteristics of domestic labor market and industrial relations institutions allowing them to excercise wage restraint. We argue that these valuable accounts are too much inward-looking and lack attention for extra-regional imbalances and how these can be explained by and interact with other domestic structural-institutional factors such as skill-formation and innovation regimes and the (resulting) economic structures (export basket, quality and market orientation).

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External Imbalances and Crisis in the EA

Macroeconomic Perspectives on the EA Crisis

The establishment of the Macroeconomic Imbalance Procedure in the European Union—'a detailed and formal framework to prevent excessive macroeconomic imbalances and to help the member states affected to establish corrective plans before divergences become entrenched' (European Union 2011)—was a clear testimony by European leaders that the causes of the EA crisis went beyond the alleged fiscal profligacy of several of its member states. Before the crisis European policymakers were not very alarmed about the evolution of widening current account imbalances in the region. In its 2006 Quarterly Report on the Euro Area the EC even claimed that these imbalances were 'a beneficial by-product of the euro and European financial market integration', as '[t]he widening dispersion has been partly driven by a trend towards financial deepening in some member states which has allowed member states with bigger financing needs to tap international capital markets more easily' (European Commission 2006: 25). It was generally assumed that the introduction of the euro had diluted the problem of diverging trade balance performance by promoting the integration of European financial markets and by facilitating the financial intermediation between surplus and deficit member states: there is abundant evidence that the EMU deepened financial integration and lowered long-term borrowing costs in the traditionally higher inflation countries in the EA, allowing these member states to finance external deficits in ways that might have been impossible without the euro (Schmitz and von Hagen 2011). Nevertheless, the crisis uncovered the boom-bust pattern of these intra-regional capital flows and the need for external rebalancing, sparking a heated debate among macroeconomists about the causes of these widening imbalances and the optimal strategy to redress them.

The theory of 'Optimal Currency Areas' (OCA) has produced the most influential body of research to frame macroeconomic debates on the causes and implications of the EA crisis. Original OCA theory, which was developed by Mundell (1961) and further elaborated by McKinnon (1963) and Kenen (1969), emphasized a number of criteria that needed to be fulfilled in order to guarantee a smooth functioning of the monetary union: (1) convergence in terms of economic structures of its member states was deemed necessary to avoid as much as possible the incidence of exogenous

'asymmetric shocks' that required a different monetary policy response in different parts of the region; (2) cross-border labor mobility was needed to encourage workers to move from high- to low-unemployment regions as a mechanism allowing states to adjust to these shocks in the absence of a national monetary policy; (3) fiscal integration was required to create a system of international budgetary transfers in order to offer temporary fiscal support to depressed member states that could no longer boost growth through exchange rate devaluation (see Eichengreen 2014 for a recent discussion of the relevance of OCA theory for understanding the EA crisis). While it was abundantly clear that the EA did not meet these conditions at the time of the euro's introduction, more recent versions of the OCA claimed that the establishment of the EMU would nevertheless be 'more justifiable ex-post than ex-ante' as monetary union would deepen trade between its member states and lead to a higher correlation of their business cycles (Frankel and Rose 1998). As such, proponents of this view maintained that European monetary unification would promote economic convergence between its member states in ways that would reduce the occurrence of asymmetric shocks and make exchange rate policy increasingly redundant as an adjustment tool.

The unsustainable rise in current account imbalances between the northern and southern EA countries and the difficult process of macroeconomic adjustment clearly refuted the optimistic version of OCA theory. The crisis, nevertheless, revealed that the EA is anything but an OCA as the adoption of the euro 'exaggerate[d] existing differences and eliminated the policy instruments required to overcome them' (Moravcsik 2012). An important macroeconomic account of the crisis and the widening EA imbalances explains the amplification of regional differences by pointing to the pro-cyclical effects of a 'one-size-fits-none' supranational monetary policy: since the ECB bases its interest rate decision on region-wide average macroeconomic conditions rather than on those of individual member states, its monetary policy will be excessively restrictive in member states with lower than average inflation and too expansionary for those with higher than average inflation (Enderlein et al. 2012). As a result, real interest rates in relatively high inflation member states were substantially lower than those in relatively low inflation member states, creating incentives for a debt-financed boom in investment spending, household consumption and government spending in the former group of countries at the same time as depressing domestic aggregate demand in the latter group of countries. Relatively high inflation countries—primarily Ireland and the

southern EA countries—experienced a boom in domestic demand that led to wage hikes and higher unit labor costs (ULC), which deteriorated their trade balance in the face of increased imports and reduced external competitiveness. Weak domestic demand in relatively low inflation countries, on the other hand, led to wage moderation and declining ULC, which improved their trade balance due to reduced imports and increased external competitiveness. As such, '[t]he ECB's monetary policy had adverse and even self-enforcing pro-cyclical effects in those Member States whose economic fundamentals were not in line with the EA average' (Enderlein et al. 2012: 16).

Analyses emphasizing the pro-cyclical effects of the ECB's one-size-fits-none monetary policy reveal a key reason why the southern EA member states accumulated trade deficits and the northern member states accumulated trade surpluses, yet do not account for the specific causal pathways leading to these imbalances. Several macroeconomists have argued that these external imbalances mostly followed from diverging shocks in domestic aggregate demand: higher economic growth associated with demand booms triggered by exceptionally low interest rates are seen as key drivers of trade balance deterioration in the periphery (Diaz Sanchez and Varoudakis 2013; Wyplosz 2013). So even if inflation differentials and diverging ULC played a role in widening the trade imbalances between the southern and northern EA countries, the divergence in external competitiveness was rather the effect of divergence in domestic demand growth.[1] It is also pointed out that the rise in ULC in the peripheral countries mostly took place in the non-tradable goods and services sector, which is seen as another indication that the deterioration of their trade balance is not necessarily related to the reduced cost competitiveness of their tradable goods and services sector. Therefore, these macroeconomists maintain that ULC dynamics in peripheral countries remained uncorrelated from export growth, with deficit countries like Spain or Greece experiencing similar growth of exports of goods and services over the period 1999–2007 to Germany.[2] According to this view, widening trade imbalances within the EA were chiefly caused by the asymmetric shock associated with the introduction of the euro on its member states: European monetary and financial integration fueled massive capital flows from the core to the periphery, which experienced a debt-financed boom in domestic demand that was translated into increasing imports of tradable goods and services and rising prices in the non-tradable sectors (Gaulier and Vicard 2013).

Although these macroeconomic analyses argue that ULC and trade balance dynamics in the EA countries were to a great extent endogenous to developments in domestic aggregate demand, the reduction of ULC in the periphery vis-à-vis those in the core through internal devaluations—that is, measures that improve their cost competitiveness by cutting wages and/or increasing labor productivity—is usually considered as an indispensible and inevitable ingredient of the macroeconomic adjustment process. The idea is that EA economies are plagued by 'rotating slumps' when the economic boom eventually turns into a recession that depresses ULC in deficit countries, which restores their cost competitiveness and their trade balance. The official view by the EC is indeed that debtor countries can reduce their external debt in a monetary union only by improving their current account balance via various internal devaluation measures that must 'mimic the effects of nominal devaluations by reducing the domestic prices and encourage expenditure-switching effects' (European Commission 2011: 21). As flexible labor markets are seen to be key to this inbuilt adjustment mechanism, these countries are instructed to implement various structural labor market reforms that are meant to remove downward wage rigidities.

A Political Economy Perspective

The above analyses have pointed to important macroeconomic dynamics that have led to the rise in regional trade imbalances, yet a number of crucial issues remain unexplored. A critical shortcoming of these macroeconomic accounts is their inability to explain why there was higher growth in ULC and inflation in the peripheral countries than the core countries in the first place. The fact that the former countries experienced a debt-fueled economic boom in response to the reduction in real interest rates does not in itself elucidate why the manufacturing sectors in these countries allowed ULC in the economy to grow significantly faster than in the core countries. Indeed, it is generally acknowledged that rising ULC in domestic sectors that are sheltered from external competition—the public sector and the private non-tradable goods and services sector—can produce an 'inflationary squeeze' on the tradable sectors, which can be adversely affected by a real exchange rate appreciation related to higher input prices of goods and services produced by the non-tradable sectors (Johnston 2012; Garrett and Way 1999). From a comparative capitalism (CC) perspective, the superior performance of the core EA countries in

terms of overall ULC and domestic inflation dynamics can be explained by their particular wage bargaining institutions, more specifically by the extent to which wage restraint—that is, real wage growth not exceeding the growth in labor productivity—is coordinated between the 'exposed' tradable goods sector and the 'sheltered' non-tradable sectors (Hancké 2013; Johnston et al. 2014). Because in most of the core countries the export manufacturing sectors play a dominant role in the economy, there is a strong incentive to keep ULC in check in the overall economy in order to safeguard the cost competitiveness of these sectors. That also explains why the supposedly inbuilt macroeconomic adjustment mechanism has been hindered by the unwillingness of these sectors in the core EA to allow for higher wage inflation. As we will see in the following chapters, the export sectors are much less important in the southern euro area member states.

The neglect of the role of rising powers in the global monetary and trading system in the deterioration of the trade balance performance of the southern EA is another shortcoming of macroeconomic perspectives, which tend to interpret the crisis as a merely internal phenomenon connected to the operation of a monetary union. It will be shown in this book that the increasing integration of the BICs in the world economy has been the equivalent of an asymmetric shock to the region: while the northern EA countries—particularly Germany—were able to maintain and even strengthen their external competitiveness in response to the region's deepening monetary and trade relations with the BICs, the southern countries experienced a striking deterioration of their *extra*-regional trade balance with the non-EA world—which has been (almost) as large as their intra-regional deficits with the rest of the EA and therefore contributed as much to their external debt burden. In contrast to OCA analyses of the EMU crisis, however, the shock was as least as endogenous as exogenous in the sense that supranational institutions amplified these asymmetrical effects on the member states of the EA. Indeed, another problem of the above macroeconomic accounts of the EA crisis is their inclination to accept the EMU's orthodox economic institutions as a given, ignoring their potentially disruptive role in the widening of regional trade imbalances and their ultimate adjustment. As we aim to show in this book, the divergence in trade balance performance between the northern and southern EA countries is to a significant extent linked to their diverging degree of adaptability to the restrictive monetary policy framework of the ECB and the liberal character of the EU's trade policy: the rules and norms guiding the

policies of these supranational institutions have amplified rather than mitigated the effects of the rise of the BICs on the trade balance performance of the southern EA countries.

A CC approach will provide us with key conceptual tools to deal with these issues. By looking at the divergent domestic political-economic institutions of the national varieties of capitalism that can be found in the EA, such an approach takes issue with the notion that the increased monetary and trade interdependency between the region and the BICs will be neutral in terms of its effects on the trade balance performance of its member states: *some models of capitalism are better adjusted to cope with the rise of the BICs in the global monetary and trade system than others.* In the CC literature, Austria, Belgium, Finland, Germany and the Netherlands are labeled as 'coordinated market economies' (CME) whereas France and the GIPS (Greece, Ireland, Portugal, Spain) countries represent the ideal type of an MME (Hancké et al. 2007; see especially Molina and Rhodes 2007).[3] We show below that the institutional adaptability of these different models to the economic rise of the BICs and their deepening monetary and trade relations with the EA depends on the presence of particular labor market institutions that allow manufacturing firms to maintain their competitiveness. Coordinated labor market institutions bestowed manufacturing firms in CMEs with comparative institutional advantages, thereby supporting the extra-regional trade balance performance of these economies. On the other hand, the absence of these labor market institutions in the MMEs rendered their manufacturing firms less institutionally adjusted to deal with the competitiveness pressures associated with the rise of the BICs. As a result, these economies ran growing trade deficits both in aggregate terms with the rest of the world and bilaterally with the BICs.

By examining the links between the rise of the BICs, European economic policies and domestic labor market institutions in the EA countries, we aim to expose some of the unexplored underlying dynamics in these countries' trade balances. It should be noted, however, that trade balance dynamics are complex phenomena that are influenced by a plethora of causal factors, and by no means do we aspire to tell the ultimate story about the origin and fate of these imbalances. Nevertheless, we do aim to show that the competitiveness pressures associated with the rise of the BICs—and the way these pressures have been amplified by European policies and institutions—are an important yet neglected international dimension of the trade imbalances and crisis in the EA. While concurring with the view that diverging competiveness between the northern and southern EA

countries have been an important cause of the imbalances and the crisis, we advance an international and comparative political economy perspective on these countries' diverging competitiveness that goes beyond the preoccupation of macroeconomists and European policymakers with the ULC dimension of manufacturing 'cost' competitiveness. As Hay (2012: 474) has forcefully argued, European policymakers have a 'dangerous obsession' with cost competitiveness based on 'the common assumption in competitiveness discourse that all product and service markets are analogous to those for cheap consumer goods characterized by high demand price elasticity'. It will be argued that manufacturing firms in northern countries have particularly outcompeted those in the southern countries in their ability to produce *high-quality* goods characterized by low demand price elasticity, which alleviated the competitiveness pressures arising from the BICs' integration in the world economy. Moreover, the cost competitiveness of the southern countries was at least as badly affected by the nominal appreciation of the euro as by their ULC dynamics, pointing to the detrimental role played by emerging markets' exchange rate interventions combined with the ECB's restrictive monetary policy framework.

By connecting the EA countries' trade imbalances to their diverging competitiveness vis-à-vis the non-EA world, we deviate from existing political economy analyses that have emphasized the role of deepening financialization and growing capital flows in the widening of these imbalances. Drawing on the concepts of Régulation theory, Becker and Jäger (2012) argue that deindustrialization combined with mass-based financialization in the periphery gave rise to escalating current account deficits. These deficits were mostly funded by northern EA banks, which were increasingly delinked from industry in their home markets and re-oriented their activities to financial markets abroad. The integration of financial markets associated with monetary unification thus fueled an unsustainable interdependency between import-dependent financialized accumulation regimes in the periphery and export-oriented productive accumulation regimes in the core. It is not entirely clear, however, why the peripheral countries in the EA were much more susceptible to financialization than the northern countries. Furthermore, financialization analyses fail to specify the reasons as to why the southern countries exploited the abundance of cheap credit by engaging in private and/or public consumption spending rather than by investing in their productive tradable goods sectors. As we explain below, this requires more attention to the distinctive labor market institutions of the existing national varieties of capitalism in the

EA and the diverging responsiveness of these institutions to the rise of the BICs in the global monetary and trading system.

Varieties of Capitalism and Imbalances in the EA

A Brief Introduction to the CC Literature

The CC literature has a long-standing interest in examining the consequences of global financial and economic integration on the macroeconomic performance of nation states and their ability to preserve the distinctive domestic political-economic institutions of their model of capitalism (e.g., Berger and Dore 1996; Coates 2000; Kitschelt et al. 1999). During the 1990s and early 2000s discussions in both CPE and IPE were focused on questions about institutional convergence or divergence in the context of globalization: starting from 'the notion that national capitalisms are distinguished one from another by particular configurations of interlocking and interdependent political-economic institutions that produce different forms of behavior on the part of economic actors, different economic and social outcomes, and different patterns of economic development', the prevailing consensus in the CC literature was that '[t]hese distinct national capitalisms are quite resistant to pressures towards convergence upon a single model of capitalism' (Howell 2003: 103). As such, scholars of CCs went against the grain of a prevalent view in the IPE literature—the 'globalization thesis'—which argued that the competitive forces unleashed by the transnationalization of trade, investment and finance would force nation states to deregulate their economies and converge toward the Anglo-Saxon model of 'liberal' capitalism. In contrast, these scholars argued that the 'social' models of capitalism that could be found in continental Europe and Japan had their distinctive comparative institutional advantage in the world economy, making convergence toward the liberal model of capitalism both unnecessary and counterproductive (Pontusson 2005).

The Varieties of Capitalism framework—bundled in a seminal volume edited by Hall and Soskice (2001)—undoubtedly became the dominant theoretical approach of CCs over the past decade (see Hancké et al. 2007 for the most recent overview). It is a mostly rational-choice institutionalist and firm-centered approach that is best known for its classical distinction between Coordinated Market Economies (CMEs) and Liberal Market Economies (LMEs) as ideal types of national models of capitalism:

firms in CMEs depend heavily on non-market relationships to 'strategically' coordinate their economic activities with other actors and construct their core competences, whereas firms in LMEs coordinate their activities predominantly via competitive arms-length market arrangements. A central assumption of the VoC framework is that LMEs and CMEs have their own 'institutional complementarities': institutions in one domain are strongly supported and reinforced by institutions in other domains. In the VoC literature, five interdependent institutional domains are usually distinguished (Jackson and Deeg 2006): the financial system (institutions shaping the firm's decision to raise finance for investment); corporate governance (institutions shaping the relation between management and the firm's stake- or shareholders); industrial relations (institutions governing employment transactions between employers and employees); the skills system (institutions shaping the education and vocational training of the workforce); and the innovation system (institutions that determine the patterns of diffusing knowledge and the loci of innovation). As Howell (2003: 106) notes, the claim about institutional complementarities is central to VoC's account of national varieties of capitalism and their macroeconomic performance: 'institutional complementarities lead to the prediction that clusters of political economies share bundles of interdependent institutions. Therefore, distinct types of political economy ought to be identifiable based upon their institutional configuration.'

More specifically, the VoC framework predicted that national models of capitalism would cluster around two ideal types—LMEs and CMEs—that are associated with characteristic production regimes based on distinctive institutional complementarities. LMEs, epitomized by the USA, have capital market-based financial systems, which work best with flexible labor markets, shareholder models of corporate governance and educational systems that encourage investment in general and transferrable general skills through the school system. As firms are dependent on arms-length and dispersed equity markets and face the prospect of hostile takeovers, flexible labor markets are needed to allow their managers to focus on current profitability and short-term stock price evaluation: '[L]abor markets allowing for high levels of labor turnover and competitive wage-setting will be more efficient, because they enable managers to reduce staffing levels quickly or to hold down wages in response to fluctuations in current profitability' (Hall and Gingerich 2009: 465). These institutional complementarities of LMEs are believed to encourage the establishment of national production regimes based on radical innovation and

mass production. In contrast, CMEs, epitomized by Germany, have more strongly regulated bank-dominated financial systems, which provide long-term 'patient' capital and are institutionally complementary to regulated labor and product markets, stakeholder models of corporate governance and educational systems stimulating investment in non-transferrable industry- and firm-specific skills through on-the-job vocational training. In CMEs, 'firms that do not have to sustain current profitability [and take into account short-term stock market fluctuations] are better placed to make long-term commitments to their employees about wages and jobs, and therefore to realize the gains available from deploying production regimes based on such commitments' (Hall and Gingerich 2009: 465). These institutional complementarities are believed to have encouraged firms in CMEs to engage in incremental innovation and diversified quality production (DQP).

Given that LMEs and CMEs are both associated with distinctive institutional benefits and economic specializations in the globalized economy, VoC predicted—as one critic has noted—a more complex process of 'dual' or 'co-convergence' reinforcing the distinctiveness of more or less equally competitive and therefore sustainable LMEs and CMEs (Hay 2004). This explicit prediction has encouraged a number of empirical assessments of VoC's claims about the presence of institutional complementarities in advanced market economies and the resulting incentives for institutional co-convergence in the context of economic globalization. The results of these empirical tests are mixed, however. Hall and Gingerich (2009) found evidence for institutional complementarities between arrangements for corporate governance and industrial relations, substantiating the VoC concepts of market-oriented and strategic coordination as distinguishing practices that lead to superior macroeconomic outcomes. Kenworthy (2006), on the other hand, concludes on the basis of a regression analysis that patterns of productivity and employment growth among 18 OECD countries between 1974 and 2000 provide little support for the notion that institutional coherence has contributed to superior macroeconomic performance. While Schneider and Paunescu (2012) detect a core of economies among 26 OECD countries conforming to the LME and CME types with comparative advantages in respectively high-tech and medium high-tech production, they also found that some CMEs have shifted part of their institutional setup toward the LME model in a way that increased their high-tech exports. Moreover, Schneider and Paunescu (2012) delineated a cluster of state-dominated economies and a cluster consisting of

heterogeneous hybrid economies such as Japan and the central European economies.

These mixed empirical results suggest that the original VoC approach has several shortcomings that constrain its potential for understanding the diverging performance of the EA countries since the introduction of the euro and the rise of emerging markets in the world economy. First, the functionalist logic of the VoC approach embodies a strong theoretical emphasis on institutional stability, preventing it from convincingly accounting for the market-oriented regulatory adjustments that occurred in many varieties of capitalism over the past few decades. By positing the existence of complementarities between institutional domains, the original VoC framework 'makes it hard to discern how endogenous dynamics of capitalist models arise' and 'thus describes relatively static models of capitalism that reflect highly coherent and stable "equilibrium" outcomes' (Jackson and Deeg 2006: 24). Comparative studies of labor market adjustments in CMEs have shown, for instance, that incremental changes have promoted a 'dualization' of labor markets between well-protected 'insider' work forces and low-paid, relatively unprotected 'outsider' segments (Palier and Thelen 2010; King and Rueda 2008). Second, the VoC's dichotomous classification of capitalist models between LMEs and CMEs is overly simplistic to account for the complexity of contemporary capitalist variety both in the EA and in the global economy (Boyer 2005; Jackson and Deeg 2006; Peck and Theodore 2007). Most relevant for this book is the attempt by Molina and Rhodes (2007) to overcome the LME-CME juxtaposition by identifying the southern countries of the EA (Greece, Italy, Portugal and Spain) as *mixed market economies*, in which the state played a key role in facilitating the coordination of economic activity and compensating for the lack of autonomous self-organization of business and labor. As such, they echoed arguments elaborated by Schmidt (2002), who also included France to this group of *state-influenced* market economies, as well as by Amable (2003) and Boyer (2005).

The separate categorization of the southern EA countries as MMEs is crucial to any comparative capitalist perspective on the EA crisis, which exposed the deviation in macroeconomic performance between the northern member states as representative countries of CMEs (Austria, Belgium, Germany, Finland and the Netherlands) and the southern member states as exemplary MMEs. While these CMEs can be defined by in terms of economic decision-making patterns that rely on strategic coordination between large firms, their interest associations and trade unions, MMEs

can best 'be understood in a two-tiered framework, in which firms attempt to negotiate the production of collective goods among themselves, but are forced to rely on the state to compensate for the gaps in the institutional framework which precludes them to deliver autonomously' (Hancké 2009: 7; Molina and Rhodes 2007). In order to compensate for their lack of coordination, 'labor and business traditionally used their access to state resources to maintain their position in the political economy' (Hassel 2014: 4). Because 'the exertion of strong veto powers by organizationally weak socio-economic interests has limited investment in specific or co-specific assets' and 'coordination failures have often been met by state intervention', 'processes of adjustment are dependent on the gate-keeping role of the state' (Molina and Rhodes 2007: 227–228). As a result, 'state intervention supports an economic system which pays out rents to economic actors in the face of economic shocks, rather than giving economic actors the means and incentives to adjust their competitiveness to a new situation' (Hassel 2014: 10). This stands in stark contrast to the domestic institutional logic of CMEs, where unions are more responsive to market pressures by investing in cooperative relations with employers at the national, sectoral and plant level and protecting the competitiveness of firms.

In the Hall and Soskice (2001) volume it was already conceded that France and the southern EA countries were 'in more ambiguous positions' (2001: 21) and did not easily fit into either the CME or the LME model. Since these countries were found to be less coherent in their domestic institutional setup than countries belonging to the LME or CME model, MMEs were generally seen to be less successful in adapting to the challenges of globalization than the other two models (Molina and Rhodes 2007). One explanation was that MMEs do not have the coordinated labor market institutions of CMEs to support their international competitiveness, nor the fluid labor and capital markets of LMEs: MMEs combine market and non-market forms of coordination with an important role played by the state (Schmidt 2002). Given that unions and employers in MMEs tend to be organized in weak and fragmented organizational structures, industrial relations tend to be conflictive in ways that have given the state a key mediating role in national wage-setting and labor market regulation. In addition, 'lower competitive pressures due to high levels of product-market regulation and state intervention help[ed] maintain stable bank-industry relations and contain the growth of financial markets' (Molina and Rhodes 2007: 226). Because these institutional features

have promoted comparative advantages in the production of mainly low-priced, low-to-medium-quality goods, MMEs have traditionally adopted accommodating macroeconomic policy regimes that strengthen domestic aggregate demand and (before adopting the euro) improve their international cost competitiveness through occasional currency devaluations. The adoption of the euro prevented these MMEs to compensate for the lack of responsiveness of their labor market institutions to developments in external cost competitiveness through sporadic exchange rate devaluations, which in the CC literature is generally seen as a key cause of the EA crisis (see below).

Varieties of Labor Market Institutions and Competiveness in the EA

The CC literature has pointed to the key role of national varieties of labor market institutions in explaining the divergence in external competitiveness of manufacturing sectors in CMEs and MMEs. CMEs are traditionally characterized by the presence of strongly organized employer associations and powerful trade unions that coordinate wages in a centralized bargaining setting in ways that are responsive to developments in the external competitiveness of the manufacturing sectors. In CMEs unions usually accept wage restraint in the export-oriented manufacturing sectors as a strategy to support the international competitiveness of firms and boost employment in these sectors. These agreements on wage restraint in the internationally exposed export-oriented sectors are subsequently extended through various arrangements to the less exposed and more sheltered sectors (such as the public sector and non-tradable sectors), preventing overall wage inflation from harming the competitiveness of the exposed sectors (Garrett and Way 1999; Hancké 2013; Johnston 2012; Johnston et al. 2014). Apart from labor market institutions that support the *cost* competitiveness of manufacturing sectors, CMEs also have distinctive educational and vocational training institutions that strengthen the *quality* competitiveness of these sectors: these institutions enable manufacturing firms in CMEs to engage in DQP strategies, thereby escaping price competition by expanding quality-competitive markets and by breaking up existing mass consumption markets. The success of these production strategies hinge on the presence of a highly skilled workforce, with workers acquiring and attaining sector- or firm-specific skills that allow firms to improve and upgrade the technology and quality of their production. The presence

of such a highly skilled workforce, in turn, relies on particular labor market institutions: CMEs are more likely to have a combination of effective work councils (or other employee representational bodies) and industry-based employer associations that cooperate with unions in the supply of vocational training (Soskice 1999; Streeck 1997; Thelen 2007).

MMEs, on the other hand, generally lack similar consensus-oriented labor market institutions that allow firms and workers to negotiate wages and develop production strategies responsive to changes in external competitiveness. Labor unions are usually much weaker and industrial relations much more conflictive than in CMEs, giving the state a key mediating role in national wage-setting and labor market regulation (Molina and Rhodes 2007; Karamessini 2008; Royo 2005). French industrial relations, for instance, have traditionally been marked by 'strong competition among workers unions not to accept any concession and therefore getting more memberships' with wage formation evolving 'mainly via the disciplinary role of high unemployment, and not at all via the internalization by the social partners of the costs of poor job creation' (Boyer 2002). As a result, there is a much higher risk that the external cost competitiveness of manufacturing sectors will be undermined due to higher ULC in these internationally exposed sectors and to the lack of wage-setting coordination with the sheltered sectors, where ULC tend to increase even faster. Furthermore, manufacturing firms in MMEs tend to score less than those in CMEs in terms of quality competitiveness. MMEs are characterized by 'the relative weakness of their educational and training systems and a real difficulty in implementing industrial strategies designed to encourage the development of high value-added products' (Lallement 2011: 637). Since the EA's MMEs lack coordinated systems of vocational training, they tend to be more specialized in the production of standardized goods with lower added value and quality (Schmidt 2003; Della-Sala 2004).

Existing CC analyses of the EA crisis have focused on the divergence in *cost* competitiveness between the region's CMEs and MMEs, arising from the fact that these countries have different wage-setting institutions with a divergent capacity to keep wages and ULC in check. As Johnston et al. (2014: 10) argue, '[u]nder a fixed monetary system, where the majority of trade is intra-regional, wage moderation pursued by one group of countries (the North), serves as a "beggar-thy-neighbor" policy vis-à-vis those (the South) that have not pursued such wage moderation' (see also Hancké 2013; Höpner and Lutter 2014; Johnston and Regan 2014). These scholars rightly point out that member states that have pursued

wage restraint experience a depreciation of their *real* exchange rate within the EA vis-à-vis members that have not—despite the fact that these countries share the same currency with the same *nominal* exchange rate. As a result, firms in the first group of countries attain a cost advantage vis-à-vis those in the latter group in a way that will lead to superior export performance, allowing the first group of countries to accumulate trade surpluses vis-à-vis the latter. In the analysis of Johnston et al. (2014) and Hancké (2013), the coordination of wage moderation between the exposed tradable sectors and the sheltered non-tradable sectors is seen to have been central to the ability of firms in the CMEs to gain competitiveness vis-à-vis those in the southern MMEs. In the latter countries, the absence of coordinated wage-setting institutions allowed wage-setters in the sheltered sectors to 'push for inflationary wage increases that produced adverse consequences for national inflation and hence relative price competitiveness in EMU' (Johnston et al. 2014: 15–16). However, Höpner and Lutter (2014) highlight that even in the exposed manufacturing sectors firms located in several countries without coordinated wage-setting institutions were neither able to restrain ULC between 1999 and 2008.

Why was it more difficult to contain the divergence in ULC after the introduction of the euro? In the CC literature of the 1990s it was generally expected that 'most nations that once had a coordinated wage bargaining system will suffer because they will become part of a common currency area with a multiplicity of uncoordinated bargaining units' (Hall and Franzese 1998: 528). The reasoning was that European monetary unification would disrupt the signaling process between the newly established independent and non-accommodating European central bank and wage-setters that would continue to operate in the context of nationally organized coordinated wage-setting institutions. These institutions were believed to resolve the 'collective action problem' that wage bargainers normally face in the presence of a non-accommodating central bank: unions that coordinate the setting of wages within and across sectors are better able to internalize the negative externalities of inflationary wage settlements—that is, the fact that inflationary wage settlements will be countered by the non-accommodating central bank's restrictive monetary policies that decrease growth and employment. The establishment of the EMU was believed to disrupt the institutional complementarity between non-accommodating monetary policy and coordinated wage-setting. On the one hand, 'to secure low rates of inflation' the ECB would 'have to resort to relatively high levels of unemployment because it will lack the

effective signaling process provided by a continent wide system of wage coordination' (Hall and Franzese 1998: 526). On the other, unions would face fewer incentives to control ULC in the presence of a central bank that targets region-wide average inflation rather than automatically responding to national wage dynamics (Soskice 1997).

In contrast to these expectations, the capacity and determination of unions in CMEs to exert wage restraint became even more pronounced after the introduction of the euro. As Höpner and Lutter (2014: 7) note, '[i]f trade partners cannot devaluate, it becomes more likely that nominal wage restraint will actually result in the enhancement of price competitiveness not only in the short, but also in the medium run. Accession to a fixed currency regime should, therefore, gradually alter the relative weight of considerations upon which exposed-sector trade unions base their wage demands.' While making wage restraint a more rewarding strategy in CMEs, the adoption of the euro is believed to have reduced the MMEs' incentive to keep ULC in check. In the run-up period to EMU during the 1990s inflation across all member states of the European Monetary System (EMS) converged on the low levels of Germany and the Deutschmark-bloc (i.e., the bloc of countries that had pegged their currency against the Deutschmark during the 1980s). The ability of national central banks to thwart excessive wage inflation in the sheltered sectors—particularly in the public sectors where unions were often most powerful—through restrictive monetary policies was paramount to the ability of the southern MMEs to meet the Maastricht convergence criteria for adopting the euro. A prevailing interpretation in the CC literature on the EA crisis is that monetary union removed the constraints that national central banks in these MMEs were able to impose on excessive wage demands in the sheltered public sectors (Hancké 2013; Johnston et al. 2014; Johnston and Regan 2014). As Hancké (2013: 77) summarizes this argument:

> EMU lifted the hard monetary constraint by removing the strong disciplining capacity of the national central banks and replacing it with the much weaker disciplining capacity of the ECB … Whereas national central banks could credibly threaten action against inflationary wages in one country, the ECB is constrained by its mandate to target an EMU-wide aggregate inflation rate. It cannot, therefore, punish individual unions who no longer play a disinflationary game. With the monetary lid lifted, the strongly organized public sector went for higher wages—wages above what its (implied) productivity rate would permit.

While in the MMEs wage inflation in the sheltered sectors rose significantly, institutional frameworks in the CMEs continued to impose formal and informal constraints on wage-setting that reined in the wage demands of trade unions in the sheltered sectors. As such, the trade imbalances and the EA crisis—so the argument goes—can be traced back to the divergence 'between countries where wages across different sectors were still coordinated (in ULC terms) and the others, where wage rates (again in ULC terms) in different sectors no longer followed central wage guidelines' (Hancké 2013: 77).

Varieties of Capitalism and the EA's Extra-Regional Trade Imbalances

The above discussion shows that existing CC accounts of the EA crisis also explain the rise in trade imbalances as an internal dynamic intrinsically related to the monetary union and its asymmetric effects on the cost competitiveness of its member states. These accounts have rightly pointed to the importance of wage-setting institutions in understanding how manufacturing firms in the region's northern CMEs—particularly Germany—were able to strengthen their cost competitiveness vis-à-vis the southern MMEs through the strategic exertion of wage restraint. By emphasizing the role of wage-setting institutions in contributing to the divergence in cost competitiveness between CMEs and MMEs, scholars of CCs have focused predominantly on the *intra*-regional trade imbalances—that is, the imbalances arising from intra-regional trade among the EA countries. Johnston and Regan (2014: 7), for instance, argue that 'the divergences in current and capital accounts that we observe in the euro area is an *internal relation*': '[T]he growing gap between *intra*-EU trade deficits in the South and *intra*-EU trade surpluses in the North is noticeably prominent after the creation of the single currency. However, the Southern domestic demand-led countries and the Northern export-led ones perform almost identically in regards to trade balances vis-à-vis *non-EU* countries after 1999' (emphasis added).

As we aim to explain in this book, a more comprehensive explanation of the regional imbalances in the EA should also take into account external dynamics in the world economy and the way these dynamics are mediated by supranational European institutions. In contrast to Johnston and Regan's (2014) findings, we will show that the divergence in trade balance performance between the region's MMEs and CMEs was almost at least as

much an external relation with the non-EA world as an internal one: the extra-EA trade balances of the MMEs deteriorated almost as much as their intra-regional ones in the years preceding the crisis, while the CMEs' extra-regional trade balances either remained more or less stable or improved significantly—as in Germany's case. The findings by Johnston and Regan (2014) are biased by three important hiatuses. First, they included France in the group of northern EA countries despite the fact that—as we show in subsequent chapters—its extra-regional trade balance deteriorated significantly. While France scored relatively well in terms of ULC dynamics since the introduction of the euro, it does not have the coordinated institutions that were critical in allowing its manufacturing firms to preserve their non-cost-competitiveness with regard to extra-regional competitors, as we will argue in Chap. 5. Therefore, it is much more appropriate to include France in the group of MMEs. Second, they do not account for the 'port effect' of Rotterdam and Antwerp on the Netherlands' and Belgium's extra-regional trade balance: as Rotterdam and Antwerp are two key transit ports where many imports from the non-EA world are unloaded and reloaded as exports to other EA countries, official trade statistics understate their extra-regional trade balance performance (see following chapters). Third, Johnston and Regan (2014) look at extra-*EU* rather than extra-*EMU* trade imbalances, which is inapt in light of the fact that the euro appreciated substantially against many other EU currencies since the establishment of the EMU.

Our analysis does not end with revealing the significant (but often overlooked) divergent extra-regional trade balance performances of the north and south of the EA. We also delve into the question how these divergences can be explained. Our main contention is that the divergent institutional adaptability of these countries to the rise of the BICs countries in the global monetary and trade system has been a key underlying source of the region's extra-regional trade imbalances, which has been further aggravated by E(M)U monetary and trade policies. The rise of the BICs intensified both direct and indirect competiveness pressures on the EA economies. First, the BICs' integration in the global trade system—particularly since China became a member of the World Trade Organization (WTO) in 2002—confronted Southern European manufacturers with more direct competition from BICs exporters within the EA as well as within third markets. Second, their external currency policies exacerbated the appreciation bias of the euro's nominal exchange rate between 2002 and 2009. During this period banks in the BICs—the People's Bank of

China (PBoC) in particular—have depressed the exchange rate of their currency by intervening in foreign exchange markets and accumulating massive foreign exchange reserves. Although the bulk of these reserves have been invested in US dollar-denominated securities, the euro has always been a favorite outlet for these countries to diversify their foreign exchange reserves away from the US dollar. Their diversification urge is related to their growing dissatisfaction with the US dollar, which has experienced structural exchange rate depreciation over the past decade as a result of persistent deficits in the US current account balance (Vermeiren 2010; Otero-Iglesias and Steinberg 2013). Due to the US dollar's depreciation and the foreign exchange interventions by the BICs, the euro has experienced recurrent rounds of appreciation/overvaluation since its physical introduction in 2002.

In order to understand why these competiveness pressures produced an asymmetric shock to the region, it is necessary to look beyond the wage-setting institutions of CMEs and MMEs—and the implications of these institutions on the *cost* competitiveness of their industrial sectors—and pay attention to those institutions that have shaped the trade structure of their economies and affected the *non-price* competitiveness of their manufacturing firms. It has been argued in the literature that globalization is reshaping the relationship between cost factors and trade performance, whereby the former are increasingly less able to explain the latter (Di Mauro and Forster 2008). As discussed above, CMEs have relatively extensive and coordinated systems of vocational training, which allows their manufacturing sectors to upgrade the quality of their production. Moreover, manufacturing firms in CMEs tend to adopt higher value-added product market strategies due to their centralized wage-setting systems, which set wage targets in terms of aggregate instead of firm-level productivity and therefore operate as 'productivity whips' by forcing underperforming firms 'up' or 'out' the market (Hancké and Herrmann 2007). The divergence in vocational training and wage-setting institutions among the EA countries has also contributed to the divergence in their trade structures: whereas CMEs tend to be specialized in the production of high-quality and high value-added manufacturing goods, the trade structures of MMEs tend to be dominated by producers of standardized goods that have low-to-medium quality and value added.

The divergence in quality competitiveness and trade structures is crucial to understanding the asymmetric effects of the rise of the BICs on the extra-regional trade balance of the EA economies. First, their divergent

trade structures also help to clarify their different degree of vulnerability to the direct competitiveness pressures associated with the integration of emerging market economies (EMEs)—and the BICs in particular—in the global trading system. Because CMEs are relatively more specialized in the production of quality-differentiated capital and consumer goods than MMEs, they benefited relatively more from the demand for capital goods by the BICs, as well as from the demand for luxury consumer goods by new capitalist elites in these countries. As Wierts et al. (2014) have shown countries with an export structure that is more composed of high-quality/technology products are more positively affected by an increase in income in partner countries than countries with a lower quality export structure. In contrast, the MMEs have been faced with relatively fiercer competition from EMEs that are specialized in the production of the same type of low value-added, standardized consumption goods, which these EMEs moreover produce at much lower labor costs. So while the deepening trade integration of EMEs, with China as the major exponent, offers primarily new export markets for firms in CMEs, it implies above all fiercer competition on both the European 'home' market and other export markets for firms from the MMEs. Moreover, it should be noted that superior extra-regional trade performance of the CMEs—particularly that of Germany—causes the euro to appreciate because of its positive consequence for the EA's *aggregate* trade balance, reinforcing the asymmetrical effects of the euro's institutional appreciation bias (see supra) on the CMEs' and MMEs' extra-regional competitiveness.

This bring us to the second and more indirect way through which the rise of the BICs have affected the extra-regional trade balance of the EA economies: we aim to demonstrate that the euro's appreciation bias between 2002 and 2009 harmed the competitiveness of manufacturing firms of the GIPS much more than those of Germany. As Frieden (2000: 260) notes, 'the sensibility of tradable goods producers to exchange rate movements is a function of the price elasticities of demand for their products'. As CMEs' firms tend to be specialized in quality-differentiated goods, extra-regional demand for their goods has a relatively low price elasticity and is therefore much less affected by an overvaluation of the euro. Firms in MMEs, on the other hand, tend to be producers of standardized goods, which are most sensitive to nominal exchange rate movements as 'they compete on price alone, and small movements in currency values can mean the difference between profitability and bankruptcy' (Frieden 2000: 260). While the diverging quality competitiveness and exchange rate vulnerability of

these two groups of countries can be linked to their divergent vocational training institutions, it should be noted that the vulnerability of their tradable sectors to nominal euro appreciation can also be mediated by their wage-setting institutions. Whereas the pursuit of wage restraint in CMEs tends to mitigate the impact of the euro's *nominal* appreciation on their cost competitiveness by containing labor costs and the *real* appreciation of its exchange rate, firms in MMEs risk being affected by an exchange rate that appreciates even more in real terms as a result of relatively higher growth in ULC. Moreover, higher value-added firms in CMEs have a much stronger capacity to absorb exchange rate appreciation into their profit margin—that is, the ability to reduce their markup in the face of an appreciation of the euro—than lower value-added firms in MMEs.

By defining the rise of the BICs in the global monetary and trade system as an asymmetric shock to the EA, we do not seek to corroborate the optimal currency area critique of European monetary union: the shock should be seen at least as *endogenous* or as *exogenous* in the sense that EMU and EU institutions amplified these asymmetrical effects on the member states. While the BICs' currency policies *exacerbated* the euro's appreciation bias, the bias has an institutional source: the lack of consensus within the Eurogroup prevented it from exploiting its formal authority over the euro exchange rate by giving exchange rate instructions to the ECB, as a result of which the exchange rate of the euro remains under control of the latter institution and is therefore subordinated to its mandate to pursue an inflation target that is near but below 2%. Consequently, the ECB will be more likely to adopt unilateral monetary policies to reverse an inflationary *depreciation* of the euro, while being more willing to accept an excessive euro *appreciation* because of its tempering effects on domestic inflation (Vermeiren 2014, 2013). As such, we draw attention to an additional reason why a non-accommodating monetary policy regime is more institutionally compatible with labor market institutions of coordinated market economies than with those of MMEs. Apart from resolving the collective action problem that wage bargainers face in the presence of a non-accommodating monetary policy regime through the presence of coordinated wage-setting institutions, coordinated labor market institutions—both wage-setting and vocational training institutions—are required to deal with the appreciation bias of an exchange rate that is controlled by a non-accommodating central bank. While the ECB more recently pursued a more accommodating monetary policy that had contributed to a significant depreciation of the euro, the institutional resilience

of its asymmetrical mandate makes it hard to fully remove the appreciation bias in its exchange rate policy. As such, its effects might resurface as soon as deflationary pressures are mitigated (see below).

Furthermore, the EU trade policy has a liberal propensity that plainly has asymmetrical distributional implications in light of the diverging effects of the integration of EMEs in the global economy on the competiveness of the EA countries. It has been argued that the original decision to delegate trade policy to the supranational level in the Treaties of Rome had the (intentional) effect of delivering a more liberal trade policy than the one that would have been pursued in (most) individual member states—the so-called collusive delegation argument (cf. Meunier 2005: 8–9). While neglecting the inter-member state distributional effects of European trade with the rest of the world, the EU Studies trade policy literature largely focuses on conflicts between the different levels (national/supranational), institutions (Council/EC/European Parliament) and/or interest groups (import- versus exporting-competing) as drivers and constraints of EU trade policy (for a review see Dür and Zimmermann 2007). Even scholars that have explained EU trade policy from a realist point of view have ignored the question how relative gains from trade are distributed between member states. While Zimmermann (2007) might be right that the EU was motivated by mercantilist interests in the negotiations about China's accession to the WTO, we maintain that the benefits from trade integration with China and the other EMEs have been unevenly distributed. In a similar vein, we argue in the following chapters that EU policies focused on improving the cost competitiveness of its member states and expanding the EU's trade relations with the rest of the world and EMEs in particular risk amplifying these asymmetrical effects. We will pause repeatedly in these chapters to explain the causes and consequences of the failure in EU trade policy to take into account its asymmetrical macroeconomic effects on member states.

Conclusion

We have reviewed in this chapter the existing macroeconomic and comparative political economy accounts of the euro crisis. While these offer valuable insights into the origins of divergences that led to the vulnerable situation in which southern EA member states found themselves after the outbreak of the GFC, we have pointed at some significant factors that are overlooked in this literature. Rather than being

an exclusively intra-regional story, we have argued that there is ample theoretical reason to assume that also monetary and trade relations outside of the EA, and with the BICs in particular, have contributed to the problems the southern member states have faced, and continue to confront. And that, besides their inability to exercise wage restraint leading to persistent loss of price competitiveness, also their low-quality specialization pattern rooted in deficient skill and innovation regimes has played an important role. Monetary policies of the BICs have aggravated the endogenous appreciation bias of the euro from 2002 to 2009, further deteriorating the competitiveness of price-sensitive goods that southern member states produce. Competition from the BICs in the product categories in which southern member states have comparative advantages negatively affected their trade performance, while the increase in demand in emerging economies for high-quality capital and durable consumer goods sourced from the CMEs contributed to a further appreciation of the euro. These dynamics amplify, rather than mitigate, the negative endogenous dynamics to which macroeconomic and CC accounts point. In the next three chapters, we will elaborate and examine these hypothesized dynamics. In the next chapter we begin by describing the impact of the rise of the BICs on the EA as a whole and on the CME and the MME groups on aggregate, before focusing in more detail on the consequences for the individual member states of each of these groups in Chaps. 4 (CMEs) and 5 (MMEs).

Notes

1. However, this dynamic does not seem to have occurred in Portugal and Italy, where domestic demand increased much less faster than in the other southern member states.
2. As we will make clear in the following chapters, the relatively good export performance of Spain and Greece neglects the effect of low starting points for these rather closed economies, which make relatively modest absolute changes look large in percentage terms.
3. When the EC recently undertook a cluster analysis to categorize EU member states into 'consistent' and 'moderate' industrial performers and a catching-up group, all the CMEs were in the first group, while Italy, Greece and Portugal were allocated to the second cluster (2013: 25ff). France was seen as drifting away from the best of the consistent performers, while Spain was seen as a borderline case.

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CHAPTER 3

The Euro Area and the Rise of the BICs: An Asymmetric Shock

Abstract The euro area is not an island. The first years of the life of the single currency coincided with tectonic global economic shifts. The accession of China to the World Trade Organization symbolized the rise of Brazil, India and China (BICs). This chapter discusses how this transformation of the global economy interacted with the adoption of the single currency and what the consequences have been for the extra-regional trade balances of the euro area. It is demonstrated that the often-hailed success of the region in global trade hides important differences in export performances and trade balances between coordinated market economies (CMEs) in the north and mixed-market economies (MMEs) in the south. Extra-regional trade deficits of southern member states have been almost as important as those within the region. On an aggregate level, we explain how these different performances can be related not only to different wage-setting institutions but also to differences in the economic structure (the kind and quality of products that are manufactured), skill-formation and innovation regimes. Finally, the role of the BICs in the monetary and trade domain and its divergent impact on the CME and MME groups are analyzed.

Introduction

The rise of the BICs is well known. While already having started in the 1990s, especially in the 2000s, Brazil, China and India have assumed their status as emerging powers, commanding a rapidly increasing share

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of global gross domestic product (GDP) and trade. Between 2001 and 2010, China increased its share of global production by an unprecedented 5.25 percentage points (O'Neill and Terzi 2014: 3–4). Between 1999 and 2013 the BICs more than tripled their share of global trade, in 2013 assuming 17.3% of global exports and 15.2% of global imports. While world trade tripled during this period, trade by the BICs grew ninefold. It must immediately be added that China is largely responsible for the increasing weight of the BICs in the global economy: China's imports accounted for 10.9% of global imports (or 71.8% of the BICs' imports) in 2013 and 13.7% of global exports (or 79.2% of the BICs' exports). As we will argue in this chapter, these impressive trade data suggest that the rise of the BICs, and of China in particular, represents a *shock* to the world economy (Hanson 2012), which naturally represents both threats and opportunities for other countries. On the one hand, their emerging middle classes' appetite for fancy western consumer goods and their industries' need for high-quality capital goods imply export opportunities for firms in advanced market economies. On the other, their specialization in cheap consumer goods, and their rapid climb up the value chain, represents potential competition for various sectors of advanced market economies.

Of course, the BICs have also become important trading partners for the European Union and the EA. In 2014, China was the EU's second trading partner (first for imports, second for exports), while India and Brazil ranked ninth (ninth for imports and 11th for exports) and tenth (idem for imports and exports), respectively. Did the rise of the BICs influence individual member states of the European single currency differently? Has it, in other words, been an 'asymmetric shock' to the region that skeptics of the euro have always predicted would threaten the existence of the single currency? That is the main question this and the following chapters seek to answer. In Chaps. 4 and 5, we analyze in depth the trade relations of the *individual* EA countries with the BICs, in the context of their overall trade balances, to find an answer to these important questions. In this chapter we examine the effects of the rise of the BICs in the global monetary and trading system on the trade balance performance of the CME and MME groups as a whole, showing that the divergence in extra-regional trade imbalances among these two distinctive groups of countries was almost as large as the divergence in intra-regional trade imbalances during the years preceding the EA crisis. The key objective of this chapter is to explain this divergence

in extra-regional trade balance performance by the hypothesized dynamics put forward in the previous chapter. In the following two chapters, we will then zoom in on the experiences of the individual members of these two groups of countries to see whether these hypotheses also hold for these individual countries.

The EA's Extra-Regional Trade and the BICs

As can be seen from Fig. 3.1, the EA as a whole appears to have weathered the shock of the rise of the BICs relatively well, outperforming both Japan and the USA (see also Cheptea et al. 2014). It lost only one percentage point (or 6.3%) of its world export market share in the period 1999–2013, while Japan lost 3.37 percentage points (or 44% of its market share), and the USA lost 3.53 percentage points (or 29.6%). The EA's performance is an achievement the European institutions have been very proud of. For instance, a Commission Report 'Global Europe: EU performance in the global economy', looking at a slightly different period (1995–2007) and beholding the EU instead of EA-12, and excluding energy), highlighted that

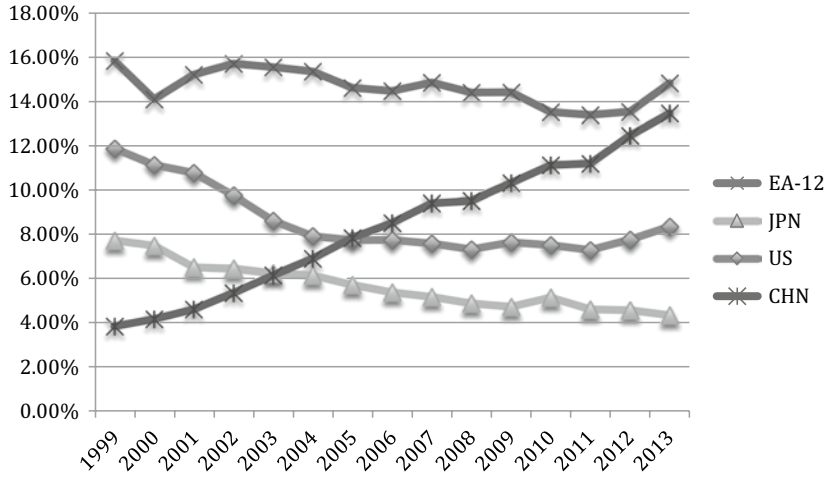

Fig. 3.1 World export shares of EA-12, USA, Japan and China (*Source:* WITS UN COMTRADE database)

> [s]ince the mid-1990s, there has been a major redistribution of market share between emerging and developed countries and among developed countries themselves. In this highly competitive environment, the EU has managed to maintain its world market share … The EU's good performance compared to the United States and Japan is due to an upgrading of the quality of its products, combined with the ability of EU companies to sell products at premium price because of quality, branding and related services. (European Commission 2008: 2)

Given that the EA's share of global imports has remained relatively stable, its aggregate trade balance remained more or less in balance between 1999 and 2013. This again stands in stark contrast with the USA, which ran a trade deficit that averaged 5.85% throughout this period.

However, the presentation of Europe as a successful trading *bloc* obscures significant differences among European countries in terms of trade with the rest of the world. When disaggregating the data, it becomes obvious that the EA should not be considered as a homogeneous trading entity, but rather as a region constituted by one group of countries that are first class exporters, and another one of members that are much less competitive globally. When differentiating between the region's CMEs and MMEs and applying this categorization aggregately, it becomes clear that the EA's aggregate trade data with the rest of the world hide significant differences between these two groups of countries. Apart from the year 2000, the CMEs ran significant extra-regional trade surpluses amounting on average to 1.25% of their aggregate GDP. On the other hand, the MMEs incurred large external deficits that increased from 0.36% in 1999 to 2.77% in 2007, with an average negative balance throughout the period 1999–2013 of 1.66% of GDP. In the period 1999–2013, the share of extra-regional deficits in the total trade deficits of the MMEs amounted to 46% on average, and was more than half over the years 2006–2012 (with a record of 61% in 2011). It can thus be concluded that the prevailing focus in the literature on intra-EA imbalances as the main cause of the euro crisis neglects the equal weight of extra-EA trade deficits in the aggregate trade deficits of the MMEs. At the same time, approximately one-fifth of the CMEs' aggregate trade surpluses resulted from extra-regional trade on average over this period (Fig. 3.2).

At first sight, these significant different external trade performances cannot be ascribed to different trade balances with the BICs countries. The CMEs and the MMEs even show remarkably similar trade patterns with the BICs (see Fig. 3.3): whereas the aggregate deficit of the CMEs with the BICs increased from 0.39% of GDP in 1999 to 1.64% in 2008–2009,

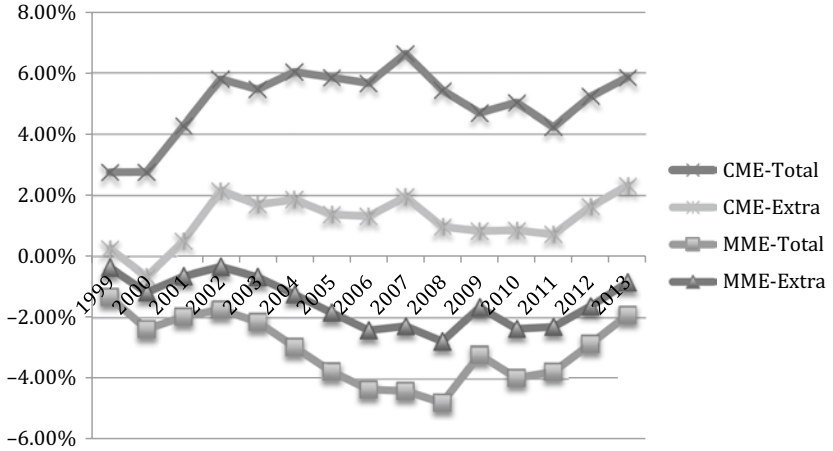

Fig. 3.2 Trade balances of CMEs and MMEs, total and extra-regional (*Source:* WITS UN COMTRADE database)

the aggregate deficit of the MMEs increased from 0.38% to 1.38% over the same period. But this representation neglects a number of important points. First, trade by the CMEs with the BICs is significantly more intense than is the case for the south. The MMEs assume a larger share of aggregate EA-12 GDP (around 53% on average over the period, compared with 45% for the CMEs and around 2% for Ireland), yet their share in trade with the BICs is manifestly lower and decreasing throughout the era. Whereas the export share of the CMEs and the MMEs to the BICs were relatively equal in 1999 (51% versus 48%), it considerably diverged afterward: CMEs were responsible for 61% of the region's exports to the BICs in 2009, yet the MMEs merely for 38%, reflecting the better export performance of the CMEs in the BICs than the MMEs. The diverging importance of imports from the BICs for the two groups is similar: it was already significantly different in 1999 (56% versus 44%) and widened to 60% versus 39% in 2013. Thus, the similar trade balances with the BICs of CMEs and MMEs can partly be explained by the greater openness of the CMEs toward the BICs and consequently assuming a relatively large share of the inter-regional trade deficit. When we calculate the share of the BICs trade deficit in total trade instead of GDP (thus controlling for the different levels of trade

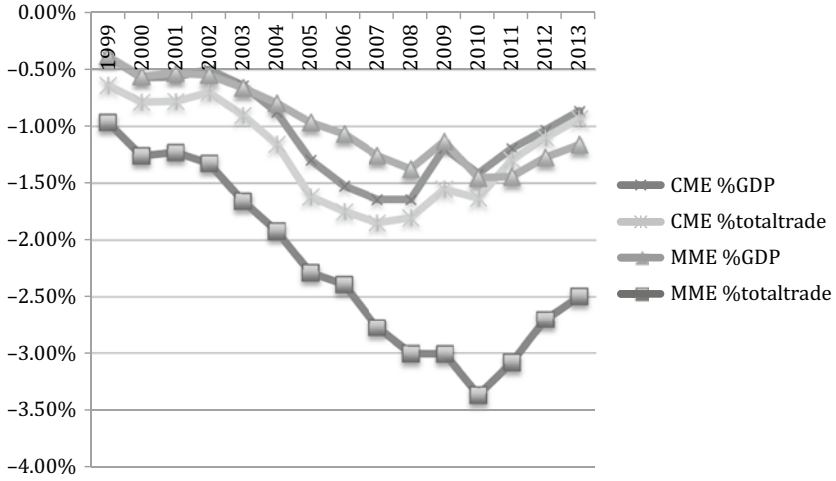

Fig. 3.3 Trade balances of CMEs and MMEs with BICs (in % of GDP and total trade) (*Source:* WITS UN COMTRADE database)

openness of both groups), it becomes clear that the MMEs perform much worse than the CMEs (see Fig. 3.3).

Second, these trade data are distorted because of the importance of the port of Rotterdam (and Antwerp, to a lesser extent) in trade with the BICs (the so-called Rotterdam effect, or 'port effect'). The Netherlands, and to a lesser extent Belgium, acts as a distributor between Asia and Europe (den Butter and Hayat 2013). Especially imports of bulk consumer goods from China and India, and raw materials from Brazil, enter Europe via the port of Rotterdam and Antwerp, and inflate the Netherlands' and Belgium's extra-regional trade deficit with the BICs, and with China in particular. In 2013 the share of imports by the Netherlands from Brazil, China and India in the EA's aggregate imports from the BICs was, respectively, 19%, 15% and 15%, whereas its share in EU exports to the BICs amounted to only 7% of EA-12 exports to China and Brazil and 6% to India. In contrast, the Netherlands' share in extra-EA-12 total imports and exports was, respectively, 13% and 10% in 2013. Hence, the negative trade balance of the Netherlands—and to a lesser

extent of Belgium—with the BICs is overrated, since a significantly higher share of imports from these countries enter Europe via the port of Rotterdam—and to a lesser extent Antwerp—and significantly less exports from Europe toward these emerging economies leave from its two largest ports. As a result, about one-third of the EA's aggregate trade deficit and roughly 80% of the CME's trade deficit with the BICs ended up on the account of the Netherlands.

Figure 3.4 contains the data on extra- and intra-EMU trade in which the Rotterdam effect on the extra-regional trade balance of the Netherlands was canceled out by assuming—for the sake of argument—that its imports from China are in fact collective EA imports (so these imports were added to the EA countries' imports according to their share in the region's GDP). Two conclusions can be derived from the figure. First, the rise in extra-regional trade imbalances has been as large as the growth in intra-regional imbalances in the years preceding: whereas the aggregate surpluses of the CMEs vis-à-vis the rest of the EA were larger than their surpluses vis-à-vis the non-EA world, the extra-regional deficits of the MMEs were larger than

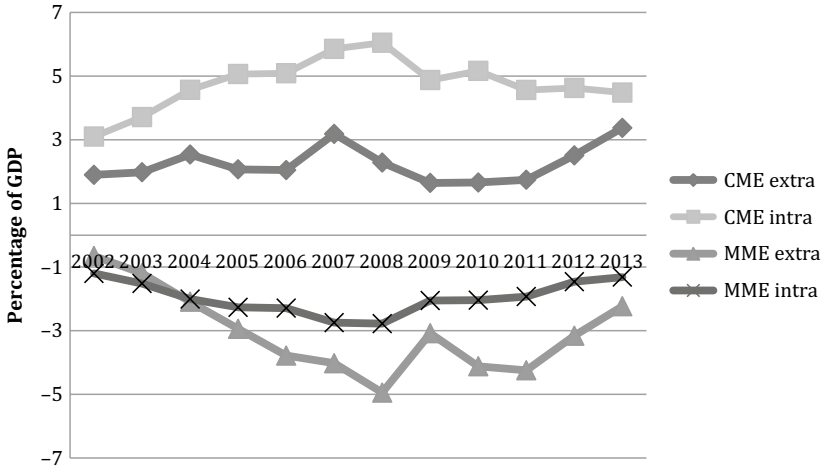

Fig. 3.4 Extra- and intra-EMU trade balances of CMEs without Rotterdam effect (in % of GDP)
(*Source:* WITS UN COMTRADE database; AMECO; authors' calculations)

their intra-regional deficits. Second, it is clear that extra-regional trade rebalancing since the eruption of the crisis has been more difficult than intra-regional rebalancing: while in 2013 trade deficits of the MMEs were still double as large as their intra-regional deficits, the aggregate extra-regional trade surplus of the CMEs increased rather than declined.

Finally, the data of *direct* bilateral trade balances between the EA countries and the BICs neglect possible *indirect* asymmetrical effects of the rise of the BICs on the EA-12 and other external markets that might be incorporated in their intra-regional and extra-regional trade balances. If these emerging economies produce goods for exports that enter into competition on international markets with goods produced by EA countries, this will not only affect their bilateral trade balances, through substitution of domestic production by imports, but will also impact on their overall trade balances, as their exports on third markets are displaced by more competitive emerging markets' exports (see also Dauth et al. 2014; Benkovskis et al. 2013; Chen et al. 2013; Abraham and Van Hove 2011). For example, if cheaper Chinese clothing outcompetes Portuguese clothing in the Western European market, this will not only translate into a weakening of the Portugal-China trade balance but will also negatively affect the *total* trade balance of Portugal, as it will diminish its exports and hence market share in the rest of the world. Hence, the deteriorating trade balances of the MMEs vis-à-vis both the rest of the EA and the non-EA world might be partly due to their exports being crowded out of international markets by emerging markets' suppliers. We argue that these substitution effects are aggravated by the effects of the BICs' currency policies on the nominal exchange rate of the euro, which—as we will show below in this chapter—has been burdened by an appreciation bias that has undermined the competitiveness of tradable goods producers in MMEs significantly more than that of CME producers. These exchange rate effects not only affect the capacity of MME firms to compete with BIC firms in both intra-regional EMU markets and extra-regional third markets but also impinge on their *general* ability to compete with *all* extra-regional firms, affecting their aggregate extra-regional trade balance performance.

After having outlined how the CMEs and the MMEs have performed very differently in global trade since the introduction of the euro and the rise of the BICs, in the next two sections we explain how we can relate these different responses exactly to the rise of the BICs in the global monetary and trade system, respectively.

The Rise of the BICs in the Global Monetary System

The BICs and the Appreciation Bias of the Euro

As hypothesized in the theoretical section, the rise of China in the global monetary system intensified the appreciation bias of the euro in ways that intensified the extra-regional competitiveness pressures on the manufacturing firms in MMEs much more than those on firms in CMEs. Figure 3.5 shows the appreciation bias of the euro between 2000 and 2009: after the depreciation during the first two years of its existence from approximately US$/€1.20 in 1999 to less than US$/€0.9 in 2001, the euro became overvalued after several years of steady appreciation against the US dollar. Scarce estimates of the 'equilibrium exchange rate' of the euro suggest that even in 2005 the euro was already significantly overvalued: Bénassy-Quéré et al. (2008) calculated that in that year the range of overvaluation for the fundamental equilibrium rate of the euro was between 6.3% and 46.9%. This, of course, suggests that the euro was hugely overvalued at the moment it reached its peak against the dollar in 2008–2009. Moreover, the nominal effective exchange rate (NEER) of the euro—the weighted average of bilateral

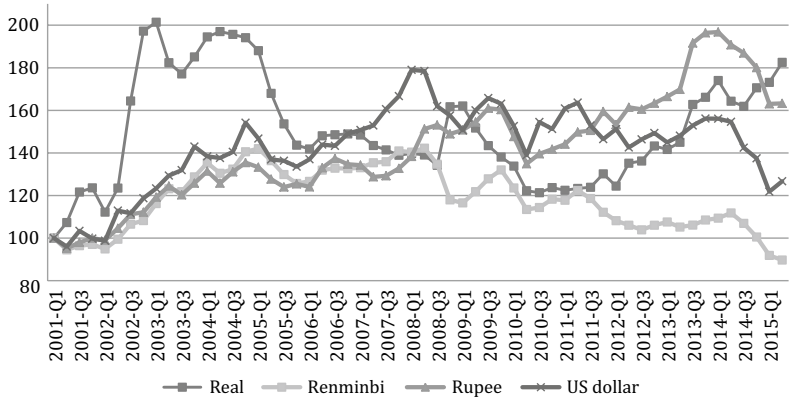

Fig. 3.5 Nominal exchange rate of the euro against the US dollar, renminbi, real and rupee
(*Source:* ECB)

euro exchange rates against the EA's 20 largest trading partners—also appreciated by 34.5% between 2001 and 2009 according to estimations by the ECB. A recent study by the IMF staff offers comprehensive evidence that the euro's nominal appreciation had a highly asymmetric impact on the extra-regional trade balance performance of the EA member states: Chen et al. (2013) found that the euro's nominal appreciation vis-à-vis other currencies accounted for the lion share of the real effective exchange rate (REER) appreciation of the southern EA economies, whose export performance was negatively affected over and above the average impact of diverging ULC on their exports to the rest of the EA.

Currency policies by the BICs contributed to the nominal appreciation of the euro: the euro had turned into the ultimate 'adjustment variable' in the unwinding of the global trade imbalances between the USA and the EMEs (Ahearne and von Hagen 2006). The unprecedented rise in the US trade deficit produced downward pressures on the exchange rate of the US dollar, yet many EME central banks countered the appreciation of their currency by massively intervening in foreign exchange markets and accumulating dollar reserves in the process. According to the IMF's COFER database, total foreign exchange reserves in the world skyrocketed from US$1566 billion in 1995 to US$10,952 billion in 2012. EMEs were mostly responsible for the exponential growth in foreign exchange reserves: their reserves grew from US$410 billion (26% of world reserves) to US$7261 billion (66%) over the same period. The BICs increased their reserves by US$2.15 trillion between 2002 and 2009. It is well known that China has been the most ardent reserve accumulator: its reserves skyrocketed from US$260 billion to US$1.97 trillion throughout the period. The bulk of EMEs' reserves have been invested in US dollar-denominated assets. Nevertheless, many EMEs considered the euro as an ideal channel to diversify their huge dollar reserves and diminish their exposure to a depreciation of the dollar: the share of the euro in allocated foreign exchange reserves increased from 19.2% in 2001 to 26.3% in 2007. As a result of their foreign exchange policies, EME central banks therefore raised their demand for euro-denominated assets dramatically over this period, thereby contributing to the rise of the nominal exchange rate of the euro against the dollar.

While all the BIC countries have intervened in foreign exchange markets by accumulating dollar and euro reserves, it should be noted that both the intensity and purpose of their interventions differed significantly. China switched its exchange rate regime from a fixed peg to a managed float in

2005, yet persistent foreign exchange intervention and accumulation contained the nominal appreciation of the renminbi against the US dollar (see Lardy and Goldstein 2008 for an overview of China's exchange rate policy). The PBoC tightly manages the exchange rate of the renminbi to buttress the competitiveness of the export-oriented and import-competing manufacturing sectors. This has led to ballooning trade surpluses, which have reinforced its incentive to intervene in foreign exchange markets in order to neutralize the associated upward pressures on the renminbi exchange rate. Hence, as a result of China's exchange rate policies, the euro appreciated not only vis-à-vis the dollar but against the renminbi as well: the euro rose from about ¥/€9.5 in November 2005 to more than ¥/€11 in March 2008—*despite* the fact that China was running a growing bilateral trade surplus with the EA (see supra). The combination of ballooning trade surpluses and foreign reserves is the key reason why China is widely seen as a currency *manipulator* (see, for instance, Bergsten and Gagnon 2012). China's exchange rate policies diverged from those of Brazil and India, whose *current accounts* were either more or less in equilibrium (in case of Brazil) or in deficit (in case of India). The latter countries mainly intervened to prevent rising surpluses on their *capital account* from leading to an extreme appreciation of their currency. As such, the Brazilian real's NEER appreciated by about 50% between 2004 and 2008, while its bilateral nominal exchange rate against the euro appreciated by 40%. The Indian rupee's NEER oscillated over the same period, whereas its bilateral exchange rate against the euro depreciated by more than 20%.

The importance of global *capital* flows rather than *trade* flows for understanding the rise in foreign exchange accumulation by many EMEs points toward the role of diverging monetary policy strategies by the Federal Reserve and the ECB in nominal exchange rate fluctuations between the US dollar and the euro. It is noteworthy that the nominal exchange rate of the euro against the US dollar—and therefore against those currencies that are pegged against the US currency—is correlated with the interest rate differential between the ECB and the Federal Reserve: an increase (reduction) of the differential between the ECB's main refinancing rate and the Fed's federal funds rate seems to be associated with an appreciation (depreciation) of the euro against the dollar. Over the past two decades the Federal Reserve's monetary policy strategy has tended to be relatively more accommodative than that of the ECB, which—in contrast to the Fed's dual mandate to maintain both full employment and medium term price stability—has a strict mandate to keep regional infla-

tion below but near 2%. Given that international confidence in a reserve currency can be bolstered by the existence of 'a consistent conservative monetary policy that is credibly embedded within domestic politics and institutions' (Helleiner 2008: 358; Walter 2006), the non-accommodative monetary policy regime of the ECB might have boosted the euro's international status as a reserve currency. While Cohen (2003) argues that the ECB's anti-growth bias has hindered the internationalization process of the euro, Otero-Iglesias and Steinberg (2013: 188) find indeed on the basis of numerous interviews with financial elites from several key dollar-holding EMEs—among which in Brazil and China—that 'in a context of extremely loose monetary policy by the Fed, the anti-inflationary stance of the ECB makes the euro especially attractive to foreign investors looking for a reliable store of value'.

However, a key problem is that the ECB's restrictive mandate introduced an 'appreciation bias' into the single currency, which has undermined the extra-regional competitiveness of producers of tradable goods in the EA (Vermeiren 2013; De Ville and Vermeiren 2014). The ECB refused to intervene in foreign exchange markets and/or adjust its monetary policy strategy in order to counter the excessive rise of the euro exchange rate, which is seen by European monetary policymakers as a merely 'endogenous variable' that needs to be subordinated to the ECB's mandate to fight inflation (Kalthenthaler 2003).[1] The exchange rate preferences of the ECB are predominantly shaped by inflation considerations, as a result of which it will be much more likely to adjust its monetary policy and/or intervene in foreign exchange markets in order to reverse an inflationary depreciation of the euro than to counter a deflationary appreciation. Taking into account the importance of European monetary policy for the exchange rate of the euro, politicians in MMEs such as France and Italy repeatedly criticized the ECB for refusing to counteract the appreciation of the euro. The Eurogroup—the ministers of finance of the EA—has *de jure* authority over exchange rate policy by having the ability to 'conclude formal agreements on an exchange rate system for the euro' (Article 219 [1] of the Lisbon Treaty) and 'formulate general orientations for exchange rate policy' (Article 219 [2]), yet several factors make sure that the ECB retains a de facto control. The first factor that constrains the Eurogroup's authority is that its exchange rate orientations cannot conflict with the price-stability mandate of the ECB—a precondition that is not easy to meet in light of the ECB's relative low inflation target and its tendency to focus on headline inflation (which includes volatile energy prices) rather than core inflation.

The second factor is even more important in constraining the authority of the Eurogroup: its inability to reach a consensus over the appropriate exchange rate policy for the euro.[2] As Henning (2007) has argued, two opposing models of exchange rate policymaking appear to divide the group. France and the southern EA countries preferred giving ministers of finance the ultimate authority over exchange rate policymaking as a way to give politicians more control over the monetary policy strategy of the ECB. According to Germany and the northern EA countries, however, the ECB should have the ultimate authority, and politicians should not be given the right to formulate interfering exchange rate instructions that would undermine the independence of the central bank (see also Henning 1994; Howarth 1999; Maes and Quaglia 2004; Quaglia 2004). In that regard, the fact that the Eurogroup never exploited its formal authority over the nominal exchange rate of the euro by imposing a target on the ECB could be explained by the unwillingness of Germany—and the other CMEs—to undermine the political independence of the ECB (Henning 2007). While the presence of orthodox monetary preferences in the Eurogroup might explain why some Eurogroup members denounce any activism with regard to exchange rate policymaking, the EA countries' diverging trade balances suggest that their asymmetric vulnerability to the nominal appreciation of the euro should be at least as much part of the equation.

Asymmetries in Exchange Rate Vulnerability

What explains the divergent impact of the euro's appreciation bias on the extra-regional trade balance performance of the EA countries? One important reason is that firms' vulnerability to exchange rate appreciation is a function of their ability to adopt production strategies that concentrate on quality differentiation rather than cost competitiveness, which depends on the presence of particular vocational training institutions. As Estevez-Abe et al. (2001: 38–39) note, '[f]irms' product market choices are shaped by the availability of necessary skills', which is in turn determined by the presence of vocational training institutions. Many studies have shown a correlation between a nation's vocational training institutions and the structure of its trade (Oulton 1996; Crouch et al. 1999). Indeed, '[a] nation's trade structure has a logical … relationship with the ability of its firms to take certain kinds of innovation' (Toner and Dalitz 2012: 414). Coordinated vocational training institutions in CMEs have been favorable to the production of high value-added and quality-differentiated goods, the demand for which is much less price sensitive and therefore less respon-

sive to exchange rate fluctuations. Since the MMEs lack these institutions, they tend to be relatively more specialized in the production of lower value-added standardized goods, the demand for which is more sensitive to price and exchange rate fluctuations. The importance of diverse trade structures for understanding diverging extra-regional competitiveness has been confirmed by several empirical studies. Due to the dominance of manufactured capital goods with low price elasticity in Germany's trade structure, Belke et al. (2008) estimate the nominal exchange rate 'pain threshold' for its exports to be around US$/€1.55—much higher than for MMEs' exports. According to estimations by Rey (2011), price elasticities of extra-EA exports are three times higher for France than for Germany (see also Chaps. 4 and 5).

In order to measure the competitive strategies of firms in a country, we calculate the Weighted Relative Unit Value (WRUV) of the country's relatively five most important export sectors, which is a concept developed by Hancké and Herrmann (2007) based on the assumption that differences in prices reflect quality differences (but see infra). The relatively most important sectors are determined by calculating the Revealed Comparative Advantage (RCA), which is obtained by comparing the export share of a product in a country's total exports to the share of that product in the world's total exports:

$$\text{RCA} = \frac{\text{Exports of Country A in Sector / Total Exports of Country A}}{\text{World Exports in Sector / Total World Exports}}$$

After identifying the five most important sectors in which a country has a comparative advantage (i.e., sectors in which it exports comparatively more than the world average; and that assumes at least 1% of its total exports), the Relative Unit Value (RUV) for every sector can be calculated by comparing its unit prices to the EA-12 unit prices in these sectors:

$$\text{RUV} = \frac{\begin{array}{l}\text{(Value of Exports in Sector p of Country A /}\\ \text{Quantity of Exports in Sector p of Country A)}\end{array}}{\begin{array}{l}\text{Value of EA} - 12 \text{ Exports in Sector p /}\\ \text{Quantity of EA - 12 Exports in Sector p}\end{array}}$$

The WRUV is the weighted average (in value added) of the RUV of these five sectors: as it measures how many percentage points average export prices in these sectors differ from average EA prices, it reveals to what extent a country adopted a high-quality rather than a low-cost production strategy. As Fig. 3.6 shows, the WRUV of those countries with the most extensive vocational training were typically higher at the beginning of the covered period and often further increased, while the WRUV of most countries with weak vocational training institutions were lower and mostly decreased over the same period. We have to take into account that the unit values do not only reflect quality but also cost. Hence, for those countries (i.e., the MMEs) where wages (or other production costs) have been rising more than for other countries, the WRUV at the end of the period overestimates the quality of their most important export categories. Moreover, the relatively high WRUV score of France and Italy compared to the other MMEs can be linked to the relatively good performance of their five top RCA sectors in terms of quality differentiation, which ignores the fact that the rest of their export structure predominantly consists of homogenous production (see Chaps. 5 and 6 for more detailed analysis of the EA countries' export structures).

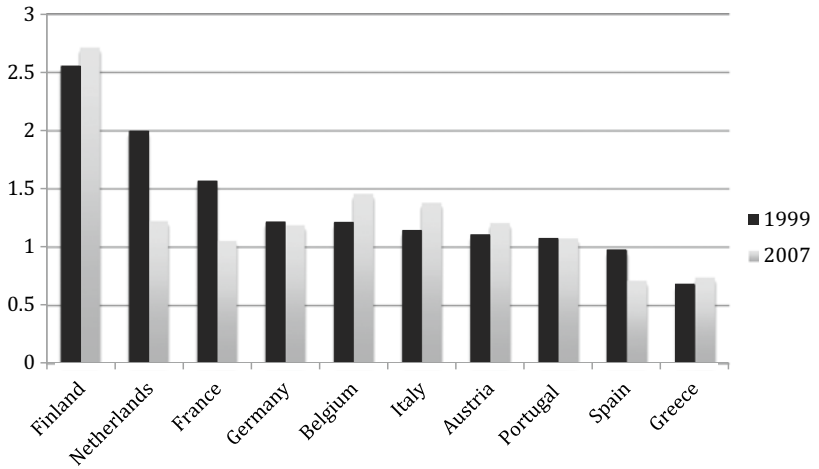

Fig. 3.6 WRUV of EA MS for 1999 and 2007

Exports by firms adopting high-quality production strategies are not as much affected by a nominal appreciation by the euro, which might even allow these firms to increase their markup in case their export prices are not adjusted in response to exchange rate appreciation (i.e., if these firms allow complete 'pass-through' of exchange rate appreciation to export prices). At the same time, firms that produce quality-differentiated goods tend to have higher markups, which give them more scope to adjust export prices in response to nominal exchange rate appreciation (and hence lower 'pass-through') (Bussière et al. 2014; Vigfusson et al. 2007). This can be an important benefit for these firms whenever an excessive appreciation reduces foreign demand even for their differentiated goods. Firms adopting homogenous low-cost production strategies, on the other hand, have more incentive to reduce export prices in response to nominal exchange rate appreciation because of the higher price elasticity of their products, yet tend to have less scope to do so as a result of usually lower markups. Taking the importance of the ability to adjust markups in response to exchange rate appreciation into consideration, firms in CMEs have also indirectly benefited from the presence of centralized wage-setting institutions: firms in CMEs tend to adopt higher value-added product strategies as centralized wage-setting systems set wage targets in terms of aggregate instead of firm-level productivity, thus operating as a 'productivity whip' by forcing underperforming firms 'up' or 'out' the market (Hancké and Herrmann 2007). As such, higher value-added firms are better able to absorb exchange rate appreciation into their profit margins, enabling them to reduce markups when the euro appreciates. This is also a benefit for those firms in CMEs that produce price-elastic goods: it should indeed be noted that the comparative advantage in quality-differentiated production does not mean that all manufacturing firms in CMEs engage in these kinds of production strategies (and vice versa for MMEs).

The importance of profit margins for allowing firms to cope with the nominal appreciation of the euro implies that the incidence of wage restraint not only helped improve the cost structures of tradable goods producers in CMEs vis-à-vis those in MMEs but also supported the capacity of these producers to adjust their markup to nominal exchange rate fluctuations by allowing them to increase profit margins. As discussed in the previous chapter, scholars of comparative capitalism have argued that coordination of wage moderation between the tradable goods sector and the non-tradable goods/services sector is key to understanding the ability of manufacturing firms in the northern countries to improve their cost competitiveness vis-à-

vis those of the southern countries (Hancké 2013; Johnston et al. 2014). They have paid less attention, however, to the fact that these divergent ULC dynamics also impacted upon their real exchange rate vis-à-vis the non-EA world and the vulnerability of their manufacturing firms to structural trends in the nominal exchange rate of the euro: whereas wage restraint and controlled ULC dynamics mitigated the detrimental effects of the euro's nominal appreciation on the cost competiveness of manufacturing firms in the CMEs, these effects on firms in the MMEs were amplified by relatively high growth in wages and ULC. As we will discuss in more detail in the following two chapters, there are indications that CME (MME) firms have translated the relatively favorable (unfavorable) evolution in ULC into higher (lower) profit margins rather than lower (higher) producer prices, resulting in an increased (reduced) ability to adjust these prices to changes in the nominal exchange rate of the euro.

The Rise of the BICs in the Global Trading System

Trade Complementarity and Competition Between the BICs and the EA

The idea that distinctive vocational training and wage-setting institutions produced and/or maintained divergent trade structures and ULC-based real exchange rates in CMEs and MMEs also goes a long way in accounting for the asymmetric competition ensuing from the rise of the BICs in the global trade system. As outlined in the previous chapter, we maintain that one of the reasons why CMEs have been much less hurt by trade with the BICs than the MMEs can be linked to the divergent complementarity of their trade structures with those of the BICs.

It should be noted that there is significant variation among the trade structures of the BICs themselves, even on a very aggregate level as we discuss in this paragraph. On the demand side, Brazil and China mainly import capital goods, although the share of this category in their total import structure decreased between 1999 and 2013, respectively, from 40% to 35% and from 50% to also around 35%. Capital goods constitute a much less important import category for India (although its share doubled from about 5% to 10% over the same period), which mainly imports raw materials and intermediate goods. China's growing appetite for raw materials is also well known: the share of commodities in its import structure increased from 10% in 1999 to more than 30% in 2013. On the export

side, primary goods have become over the period by far the most important category for Brazil (its share of total exports increased from 20% to 45%); the share of capital and consumer goods decreased both from less than 25% to about 15%. China was in the beginning of the 2000s still primarily a consumer goods exporter, with more than half of its foreign trade revenue coming from consumer products. While this has remained an important export category (around 40%), China increasingly became a major exporter of capital goods itself: its share increased from about 20% to more than 45%.[3] Consumer goods have been the most important export category for India (about 45% on average). The aggregate trade structure of the EA shows that capital goods have become a less important import category for the region (from about 35% in 1999 to about 25% in 2013), while consumer goods and primary products have increased their share (respectively from about 30% to more than 35% and from 15% to more than 20%). On the export side, the EA mainly exports capital goods and consumer goods, which have overtaken capital goods as the most important export category since 2011: although capital goods had a stable share until 2008 at around 38%, this has subsequently decreased with 2.5%.

We demonstrate below that the aggregate trade structure of the EA—and the ensuing relative compatibility of trade with the BICs—masks important variation between the CMEs and the MMEs: whereas the export structures of the CMEs were much more compatible with the import structures of the BICs than those of the MMEs, the export structures of the latter countries were more similar to and hence in competition with those of the BICs.

Asymmetries in Trade Complementarities

In order to test the hypothesis that the trade structures of the CMEs are more compatible with the trade structures of the BICs than those of the MMEs, we calculated Michaely's trade complementarity index for these two groups of countries—quantifying the compatibility of their export structures with the import structures of the BICs—as well as a similar trade competition index—gauging the extent to which CMEs and MMEs export the same kind of goods as the BICs and are hence exposed to competition with them—each time for the years 1999, 2001, 2004, 2007, 2010 and 2013. It shows the correlation of both groups' exports to the world with each of the BICs imports from, respectively exports to, the world: if a group exports relatively many products that the BICs imports (exports), their trade profiles are more complementary (competitive).

Formally, the trade complementarity index, an algebraic indicator, is computed as follows: $C^{AB} = 1 - \sum_{K} \left| m_k^A - x_k^B \right| / 2$, where m_k^A is product k's share in A's imports from the world and x_k^B its share in B's exports to the world. The index has a value between 0 and 1. The higher the index, the more complementary country B's exports are with country A's imports. In a similar vein, the trade competition index measures the correlation of country group A's exports to the world with country or country group B's exports to the world: if B exports many products that A exports, they are seen to be export competitors. The trade competition index is computed as follows: $C^{AB} = 1 - \sum_{K} \left| x_k^A - x_k^B \right| / 2$, where x_k^A is product k's share in A's exports to the world and x_k^B its share in B's exports to the world. The index has a value between 0 and 1. The higher the index, the more country B's exports compete with those of A on world markets.

We can see in Fig. 3.7 that exports by the CMEs have generally been more complementary with import demand from the BICs than those of the MMEs, and that this gap widened during the previous decade, especially vis-à-vis China and Brazil. Moreover, as Fig. 3.8 shows, exports from the MMEs to world markets (including within the EU) have faced more competition with exports from the BICs, especially during the early years of the euro area's existence. While the CMEs have also faced increasing competition in world markets according to their increasing trade competition index with India and China, it should be noted that the index does not take into account the quality-differentiated nature of many of their export goods (see supra) and therefore overstates the degree of export competition with the BICs. As explained in Chap. 2, the more intense competition the MMEs face with the BICs is not only reflected in their bilateral trade balances but in every market, including within the EA. Figure 3.9 depicts the market shares of the BICs, the CMEs and MMEs in the EA's aggregate imports: in the context of a dramatic increase in imports from the BICs, the CMEs have kept their share in the EA market until 2008, whereas the MMEs lost more than a quarter of their market share. This points to a displacement effect whereby a substantial share of the MMEs' exports to the EA market has been overtaken by the BICs—particularly by China. Such an effect was indeed exposed by Chen et al. (2013), who present econometric evidence for the thesis that exports from the southern MMEs have been displaced from their foreign markets

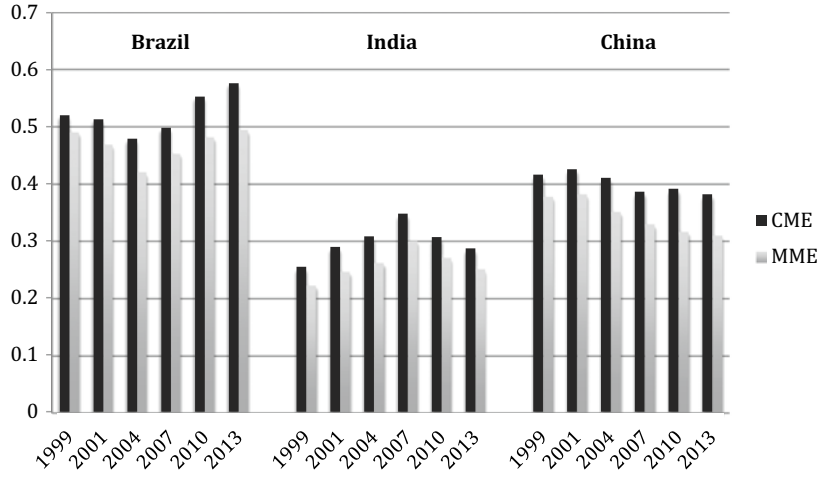

Fig. 3.7 Export complementarity of CMEs and MMEs with BICs

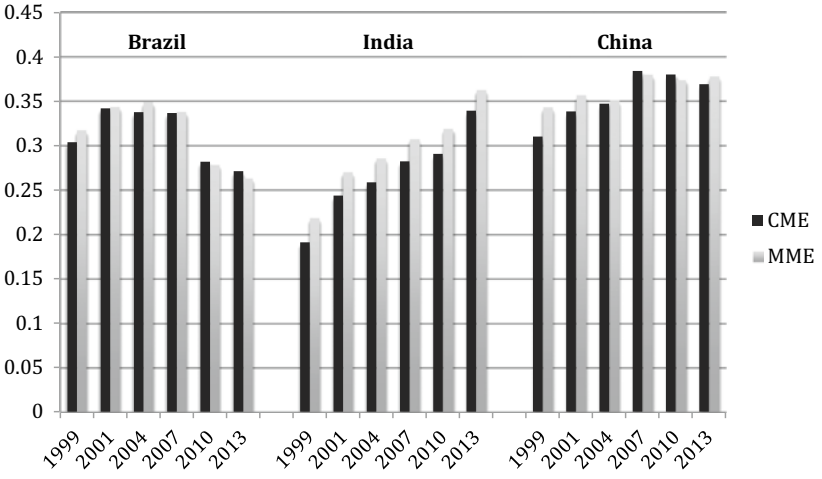

Fig. 3.8 Export competition of CMEs and MMEs with BICs

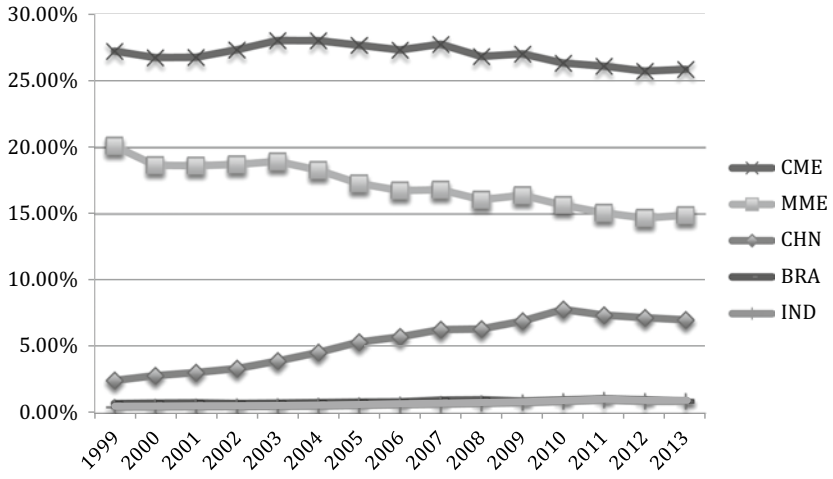

Fig. 3.9 Market shares of CMEs, MMEs, China, Brazil and India in EA-12 (*Source:* WITS UN COMTRADE database)

by Chinese exports. Also Cheptea et al. (2014) found that the GIPS suffer from a poor sectoral specialization.

The observation that firms from the southern MMEs, which tend to be specialized in the production of goods with high price elasticity of demand, face more direct competition from BIC exports suggests that ULC dynamics are also relevant for understanding their bilateral competitiveness vis-à-vis manufacturers in BICs. While there is significant variety in the domestic institutions of their national model of capitalism, Nölke et al. (2014) argue that the preservation of a low-wage regime is a common feature of the BICs' labor market systems: 'Labor relations are characterized by a triple segmentation and segregation of the labor force into a comparatively highly paid and well-protected segment, a less well-paid and unprotected segment, and an informal sector … This labor regime is supported by a continuous supply of cheap rural labor power and state preservation of low wages through the selective non-enforcement of labor regulations' (2014: 7). A key characteristic of the Chinese labor market was until recently the 'unlimited supply of cheap labor', implying that the suppression of ULC were at least as much a source of external cost advantage to its tradable goods sectors as an undervalued exchange rate.

As we show in the subsequent chapters, the share of total labor compensation in China's GDP decreased from 52% in 1999 to 42% in 2007. While the share of total labor compensation in India's GDP is higher than that of China, it is clear that labor compensation neither grew at the same pace as productivity. The only BIC country that seems to deviate from this trend is Brazil, where the share of total labor compensation in GDP reached a trough at the beginning of the first Lula administration and been increasing ever since. It is remarkable that existing analyses of comparative capitalism have focused their attention only on intra-regional wage and ULC dynamics and neglected the effects of diverging ULC trends vis-à-vis the BIC countries, which have become key competitors in intra- and extra-EA markets—for some MMEs even more so than the region's CMEs.

Have policymakers in the EA been aware of and responded to (the diverging impact of) competition from the EMEs? Because of lack of transparency about how EU member states vote in EU trade policy, we know relatively little about positions and potential conflict in this policy area. An exception to this gap in the academic literature is an article on EU anti-dumping (AD) policy by Evenett and Vermulst (2005), who circumvented the lack of official information on member states' positions by using media articles reporting on member states' votes on AD measures. Noting that China topped the list of the target states of the reported AD proposals, they conclude that there are two blocs with respect to EU (–15, in the period they studied) AD policy: five member states—all MMEs—showed a high tendency to vote in favor of AD measures: Portugal (100%), France (95.5%), Italy (95%), Greece (92.3%) and Spain (85%). Other member states showed much less propensity to support AD measures: it is particularly noteworthy that Germany opposed AD measures in all of the reported instances. Apparently, MMEs have been aware of their precarious position in extra-regional trade, with China in particular, and have tried to use AD measures as an instrument to alleviate competition on the EU market. Nevertheless, their efforts have been undermined by more competitive member states, led by Germany, which were able (until a recent change in voting rules toward reversed qualified majority) to block the imposition of AD measures by a simple majority.

The inability of the EU to respond coherently to rising imports from China and other emerging economies was especially significant given increased competitive pressures building up in the 2000s. China's accession to the WTO in late 2001 (after 15 years of intense negotiations) led to a surge in imports from China into the EU: for instance, textiles and

clothing categories that were immediately liberalized in 2002 increased by 46% in value and 192% in volume (Comino 2007: 827ff). Textiles and clothing, which were (and still are) an important sector for the southern EA countries in the beginning of the 2000s, had a special protected status within the international trading regime through iterative 'Multi-Fiber Arrangements', which quantitatively limited imports from developing countries. In the 1994 GATT Uruguay Round Agreements, a gradual phase-out of these quantitative restrictions was foreseen. In reality, the implementation was pushed toward the end of the transition period, culminating into a 'big bang' liberalization in 2005—a year when import surged between 71% and 534% depending on the product category. Understandably, southern member states, most notably Spain, France and Italy, strongly advocated for prolonged restrictions against Chinese exports. The Spanish textiles industry reportedly lost about 55,000 jobs between 2003 and 2006. For a country such as Italy, the consequences were less clear-cut as some firms were serving the high-end market or were able to upgrade their production, showing that 'even within one country's industry, there are brand owners who see China as a market opportunity and those manufacturers who are losing out as consumers shift toward cheaper imports' (Comino 2007: 829). Northern member states had opposite interests, as these countries had already seen the larger part of their textile industry disappear and/or had specialized in, for example, chemical fibers for technical textiles with growing demand in China. Eventually, the EU and China reached a deal with the latter restraining its exports in a number of categories for the next three years. Similar difficulties to take a coherent stance appeared the year after in the 'shoes dispute' between the EU and China (as well as Vietnam).

Extra-Regional Trade Rebalancing Since the Crisis

The preceding analysis showed that the MMEs' extra-regional trade deficits can be linked to the deepening monetary and trade relationship between the EA and the BICs, which produced an asymmetric shock to the region that was amplified by European monetary and trade policy. Both the ECB and the EC have emphasized the importance of extra-regional export growth as a way out of the EA debt crisis. The president of the ECB Mario Draghi once rebutted the concern that the ECB's support of fiscal retrenchment might lead to a deflationary spiral in the EA as follows: '[i]f you enhance the competitiveness [through fiscal consolidation], you can actually count on your external demand, on your

net exports' (Draghi 2011). Such a strategy is also endorsed by the EC. Shortly after the crisis broke out, the EC formulated a new trade strategy, dubbed 'Trade, Growth and World Affairs'. In this strategy then Trade Commissioner Karel De Gucht argued that the EU had to 'trade its way out' of the current crisis: '[b]y 2015, 90 per cent of world growth will be generated outside Europe, with a third from China alone …. So in the years to come, we need to seize the opportunity of higher levels of growth abroad, especially in East and South Asia' (European Commission 2010: 2–4). Nevertheless, as Fig. 3.4 above has shown, extra-regional trade rebalancing has been more difficult than intra-regional rebalancing. How can this be explained?

First of all, it is important to note that the euro's appreciation bias remains a key impediment for the extra-regional rebalancing by the MMEs. As Fig. 3.5 showed, the exchange rate of the euro experienced an undulating path since the eruption of the EA crisis. The euro underwent a substantial depreciation during the initial stage of the crisis yet bounced back between 2010–Q2 and 2011–Q2. After experiencing depreciation in the face of an escalation of the crisis between 2011–Q2 and 2012–Q3, the euro endured upward pressure since the ECB decided to do 'whatever it takes to save the euro' (Draghi 2012). Currency policies by the BICs played an ambivalent role in the euro's persistent appreciation bias. After re-establishing a fixed peg with the dollar between 2008 and 2010, the PBoC allowed a nominal appreciation of 12–13% against the dollar and the euro between 2010 and 2013. Nevertheless, persistent surpluses in China's balance-of-payments between 2008 and 2013 led to a vast accumulation in foreign exchange reserves, which put upward pressure on the exchange rate of the euro by creating an artificially high demand for euro-denominated assets: assuming that approximately 25% of China's reserves are invested in euros, the PBoC accumulated more than $563 billion in euro-denominated assets from 2008 to 2013. Since the exchange rate of Brazil and India experienced a substantial appreciation between 2009 and 2013 as a result of booming capital inflows in the wake of monetary expansionary measures by western central banks, these two countries were forced to intervene in foreign exchange markets and accumulated US$225 billion throughout the period.

The ECB's relatively orthodox monetary policy since the crisis played an important role in the euro's appreciation bias: the persistent strength of the euro was also the result of the ECB's relatively restrictive monetary policy response to the global financial and EA crisis (Bénassy-Quéré et al. 2014).

While the Federal Reserve, the Bank of England and the Bank of Japan all adopted aggressively expansionary measures by expanding their balance sheet through various quantitative easing (QE) measures, until January 2015 the ECB persistently refused to engage in large-scale asset purchase programs to support the EA economy. It should be noted that the ECB's September 2012 decision to engage in 'outright monetary transactions' (OMT)—a pledge to buy an unrestricted amount of sovereign bonds of those member states that have applied for a bailout—did not lead to any purchases of sovereign bonds: by reassuring foreign investors that the EA would not break up, the ECB's OMT decision almost certainly contributed to the euro's rise since 2012–Q3. In this respect, it might be argued that the exchange rate of the euro became an adjustment variable in the purported 'global currency wars' that inflicted the global monetary system between 2010 and 2013. The major central banks' QE policies—particularly those by the Federal Reserve—contributed to a surge in private capital flows to EMEs, whose central banks responded by stepping up their accumulation of foreign exchange reserves in order to prevent an excessive appreciation of their currencies (see Fratzscher et al. 2012 on the international spillovers of the Federal Reserve's QE). Given that the ECB's monetary policies have been more restrictive than those of its peers, the exchange rate of the euro became squeezed between the expansionary monetary policies by the major central banks and the continuing foreign exchange interventions by EMEs such as the BICs.

The persistent appreciation bias was particularly bad news for the southern MMEs, which were forced to strengthen their cost competitiveness in order to reduce their trade balance and improve their external debt sustainability. Several empirical studies confirmed the importance of a nominal euro depreciation for their recovery from the crisis. While Spain, Greece and Portugal made substantial efforts in realigning their REER by means of declining ULC vis-à-vis the surplus countries (see below), Darvas (2012) found that far-reaching extra-regional trade rebalancing through a nominal depreciation of the euro was required for the MMEs to safeguard their longer-term external solvency. Nevertheless, policymakers in the EC and ECB tended to disregard the harmful effects of the euro's nominal exchange rate on the cost competitiveness of the southern MMEs, which have been instructed to improve their trade balance through various 'internal devaluation' measures that must 'mimic the effects of nominal devaluations by reducing the domestic prices and encourage expenditure-switching effects' (European Commission 2011: 21). These measures typically refer to a decline in ULC through fiscal consolidation and labor

market reforms, which are meant to improve the price competitiveness of their manufacturing sectors by reducing real wages and labor costs.

As we discuss in Chap. 4, these measures have certainly generated favorable ULC dynamics for manufacturers in most MMEs: only Italy's ULC-based REER increased by more than 7% between 2008 and 2013; in all the other countries the ULC-based REER depreciated—with particularly sharp declines in the crisis countries Spain (minus 20%), Greece (minus 23%) and Portugal (minus 10%). At the same time, ULC in China have risen by more than 70% over the same period, particularly since the declaration of the Chinese government's latest 12th Five-Year Plan that aims to shift 'the focus from a powerful export-oriented and investment-led growth dynamic toward an approach aimed at drawing more support from China's 1.3 billion consumers' (Roach 2011: 1). Given that ULC increased in Brazil and India as well and that the NEER of both Brazil and China appreciated by more than 7% between 2009 and 2013, manufacturing firms in the southern MMEs countries experienced a rebound of their cost competitiveness vis-à-vis those in BICs in terms of ULC-based REER.

There are several reasons why the southern MMEs have not been able to capitalize on their improved ULC dynamics via a more substantial improvement of their extra-regional trade balance performance. First, the supply-side focus on improving the cost competitiveness of the tradable goods sector through a decline in ULC coincided with a neglect of demand-side implications: the asymmetric distribution of the burden of macroeconomic adjustment depressed intra-EA demand to such an extent that both the CMEs and the MMEs became more dependent upon the attainment of a trade surplus with the extra-EA world to support their growth (see Table 4.5 in Chap. 4). Because the CMEs refused to compensate for the internal devaluation measures by the southern MMEs by adopting internal revaluation measures (i.e., laxer fiscal policies and higher wage inflation), the improvement of the latter countries' intra-regional trade balance was almost entirely based on a collapse in their imports (see Table 5.5 in Chap. 5). As a result of weak domestic aggregate demand in the EA, manufacturers in the CMEs—particularly Germany—increasingly diversified their export markets toward the non-EA world. The main problem is that these intra-regional rebalancing dynamics have moved the EA's aggregate current account to a surplus of €221.3 (2.3% of GDP) in 2013, pushing up the euro's exchange rate in ways that undercut the challenge of the MMEs to move their extra-regional trade balance into a significant surplus. While weakening the extra-regional cost competitiveness of all tradable goods man-

ufacturers in the region, a high euro is above all problematic for producers of price-sensitive goods with low-to-medium added value in the MMEs.

Second, the EC's and the ECB's focus on flexibilizing labor markets and decentralizing wage-setting systems as a way to improve the external competitiveness of the MMEs conflicts with the need to move their trade structure toward higher value-added quality-differentiated production. As discussed above, it is a well-established premise in comparative capitalism literature that flexible labor markets and decentralized wage-setting institutions are more likely to lead to a comparative advantage in low-cost and low-quality production (Hancké and Herrmann 2007)—a causal link that has been confirmed by recent country case studies (e.g., Lucidi and Kleinknecht 2010). As we argued in this chapter, the low competitiveness of the southern EA countries was at least as much about the need to upgrade their trade structure to higher productivity and higher technology sectors as it was about the need for lower wage costs. Without significantly lifting the quality and added value levels of their tradable goods sectors, internal cost devaluation through labor market restructuring was bound to depress domestic demand in these countries more than it would boost their exports (Felipe and Kumar 2011). This is particularly the case in the context of the rise of the BICs in the global trading system. While over the past years ULC in China and the other BIC countries have increased substantially relative to those in the MMEs, labor costs for BIC manufacturers will remain low vis-à-vis those in MMEs for the foreseeable future. Moreover, other EMEs and developing countries with abundance of cheap labor would be the main beneficiaries in the event that rising labor costs erode the cost competitiveness of the BIC countries, making the quality and productivity upgrading of industrial production through institutional investments in workforce skills a more viable long-term strategy for the MMEs.

Conclusion

We have shown in this chapter that while the EA as a whole has performed well in terms of global market shares and trade balances, including vis-à-vis the BICs, this assessment hides significant differences between CMEs in the core and MMEs in the periphery. MMEs have accumulated large trade deficits outside of the EA while CMEs have recorded important extra-regional surpluses. We have also demonstrated that the BICs have played a role in these diverging results in the way we hypothesized in the previous chapter. Monetary policy of the BICs contributed to the appreciation of

the euro and to the consequent deterioration of the competitiveness of the MMEs. This negative effect on the competitiveness of the south has been reinforced by the export surpluses of the north. We have shown that MMEs are more vulnerable to the appreciation of the euro and cost-competition from the BICs because of the composition of their export structures which historically, and (except for Italy) increasingly over the period, compete rather on price than on quality and are more in competition with and less in demand by the BICs than has been the case for the CMEs. In the next two chapters we will make this analysis more detailed and more tangible as we zoom in on the performances of individual member states of the CME and MME categories, respectively.

Notes

1. Interview with representatives of the Spanish central bank (October 2014) and with representatives of the Bundesbank and ECB (December 2014).
2. Interview with representative of the Spanish ministry of finance (October 2014) and with representative of Belgium's permanent representation in the Eurogroup (November 2014).
3. As Li et al. (2012: 137) have shown for the period 1996–2008 'the pattern of Chinese merchandise trade reveals an underlying change in China's economic structure from one dominated by the assembly and processing of a wide variety of low-technology, light consumer goods such as textiles, clothing, footwear, toys, sports goods and simple household goods to higher technology products, although in these higher technology sectors China often remains dependent on imports of technology-intensive components'.

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CHAPTER 4

CMEs: Profiting from the BICs' Industrialization

Abstract This chapter discusses the impact of the rise of the BICs on the CMEs' external trade balances. It is shown that the CMEs, and Germany in particular, have accumulated significant trade surpluses not only inside the euro area but also extra-regionally, and that they have been able to re-orient their exports after the crisis toward the rest of the world. We argue that labor cost dynamics and wage-setting institutions cannot satisfactorily explain the remarkable extra-regional trade performances of the CMEs. This success is to significant extent related to non-price competitiveness factors, more specifically their trade structures in terms of product composition and quality, rooted in the specific skill and innovation regimes of northern euro area member states. These factors have allowed the CMEs to suffer less and profit more from the rise of the BICs than the other euro area member states. Indirectly, they have managed to relatively escape the negative effects of the appreciation of the euro as a consequence of monetary policies of emerging markets. Directly, their production has confronted relatively limited export competition from and high import demand by the BICs. After the crisis, their export strength has allowed them to deflect the adjustment burden completely to the southern euro area and shape reform of the EMU in a way that further reinforces their export interests in the short term, while generating negative spillovers and contradictions in the longer term.

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Extra-EMU Trade Balance Performance of the CMEs: Broad Empirics

In this chapter we zoom in on the CMEs', or core EA, countries' external trade performances before and after the crisis, in general, and with the BIC countries in particular. We can see in Fig. 4.1 that for most of the CME countries trade in goods has had a positive effect on their income. With the exception of the Netherlands—remember the effect of Rotterdam as the import hub for Western Europe discussed in Chap. 3—and with a mixed picture for Belgium (where the 'Antwerp effect' also plays out, albeit to a lesser extent than for its big brother Rotterdam), CME countries have run positive trade balances outside of the EA. This is especially the case for Austria and, most importantly, Germany. As can be seen, already before the crisis, extra-EA trade surpluses were (almost) as important as intra-EA surpluses for Germany, and in recent years, its positive trade balance outside of the EA has been double that within the region. Extra-regional trade has become more important for all of the CMEs

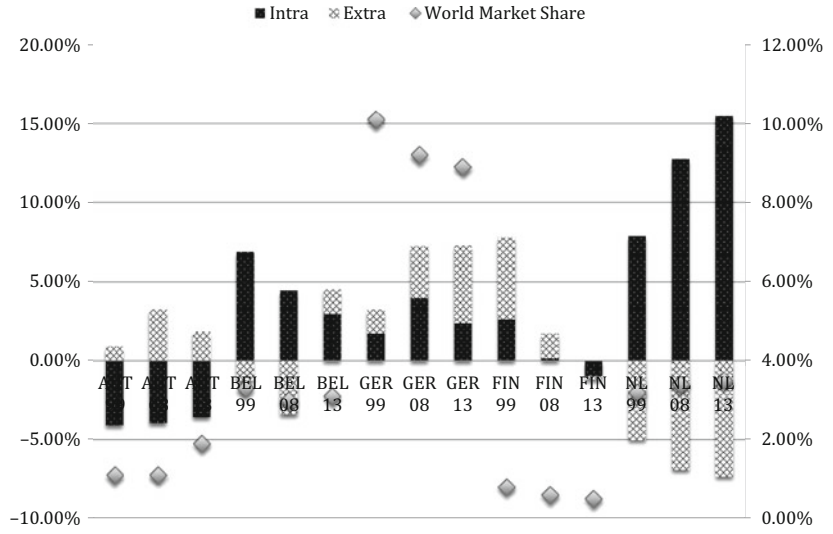

Fig. 4.1 CMEs: trade balances intra- and extra-EA (lhs) and world export shares (rhs) (*Source:* WITS UN COMTRADE database)

during this period. For Austria, Belgium, Finland and Germany, the extra-regional share in total exports increased by almost 10%, even to above 65% and 73% in the case of Germany and Finland respectively.

What is the role of the BICs in the CMEs' extra-regional trade performance? As we can see in Fig. 4.2, the CME countries have had trade accounts in balance or small surplus with Brazil and India. All of them have accumulated significant trade deficits with China, but, with the exception of Western Europe's main import hub the Netherlands, their negative position peaked at the time of the outbreak of the global financial crisis (GFC) in 2008 and stabilized or decreased afterward. Again, this is most apparent in the case of Germany, which decreased its trade deficit with China from 1.03% in 2008 to 0.25% in 2013. In 2013 Germany and Belgium had a trade position that was almost in balance with the BICs. As can be seen in Fig. 4.3, the BICs have become a significantly more important export destination for all of the CMEs throughout the 1999–2013 period. For most of these countries the share of Brazil and India as a destination in their total exports has about doubled, while China's share has on average quadrupled. Once again, this is most obvious for Germany. More than 6% of Germany's total exports went to China in 2013. China has become the fifth export destination of Germany in 2013, only slightly behind the UK and the Netherlands.

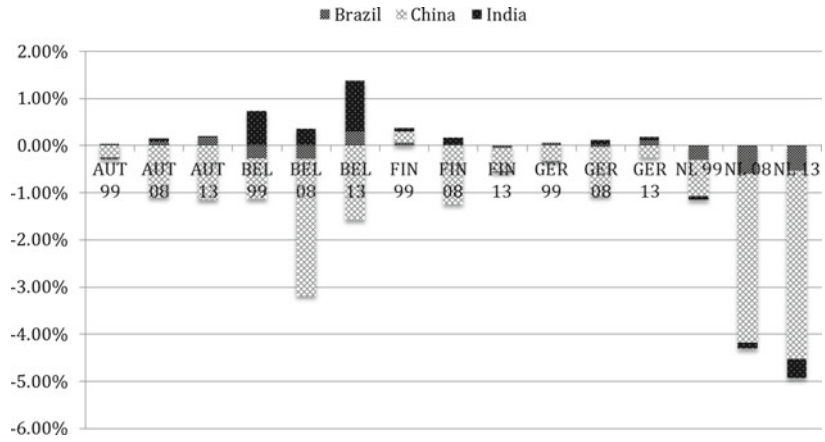

Fig. 4.2 CMEs: trade balances with Brazil, China and India (*Source:* WITS UN COMTRADE database)

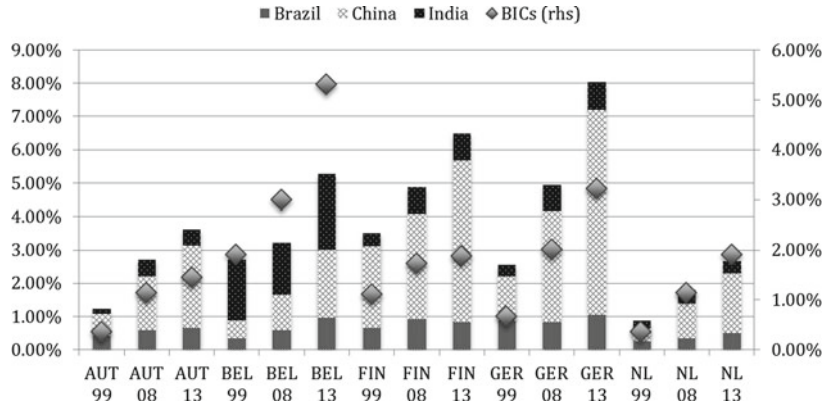

Fig. 4.3 CMEs: share of Brazil, India and China in total exports and in GDP (BICs, rhs)
(*Source:* WITS UN COMTRADE database)

Explaining the Extra-EMU Trade Balance Performance of the CMEs

ULC Dynamics, Wage-Setting Institutions and Price Competitiveness

As we discussed in Chap. 2, scholars of comparative capitalisms explain the exceptional trade balance performance of the EA's CMEs mainly by looking at the distinctive wage-setting institutions in these countries. Encompassing, centralized and/or coordinated collective bargaining at the national level is believed to have reduced the collective action problem among unions to push for 'excessive' wage increases, leading to persistent wage moderation and beneficial ULC dynamics that have permitted their manufacturing firms to maintain—and in some cases even increase—their cost competitiveness. Especially the presence of labor market institutions containing wage increases in the sheltered non-tradable goods and services sectors is seen to have been key to the ability of these firms to uphold their cost competitiveness: trade unions in the export sector have been granted with veto powers in the determination of national wages—either directly or indirectly via state intervention—and these unions have the incentive to contain wage growth in sheltered sectors, which might undermine the competitiveness of the exposed export-oriented sectors by increasing the cost of intermediate inputs (Hancké 2013; Johnston et al. 2014). In this section we aim to

show that this interpretation fails to account for the distinctive *extra*-regional trade balance of the CMEs. First, we demonstrate that differences in wage and ULC dynamics between the manufacturing and sheltered sectors in various CMEs are not entirely consistent with the above interpretation and are difficult to explain merely by looking at their distinctive wage-setting institutions. Second, we compare ULC dynamics in the CMEs with changes in producer prices and NEER to illustrate that manufacturing firms in CMEs have experienced a decline in their extra-regional price competiveness, which suggests that coordinated wage-setting institutions cannot easily account for their relatively superior extra-regional trade balance performance.

While the EA's CMEs all have wage-setting institutions that contain wage and ULC developments in the exposed and sheltered sectors, there are important institutional differences in terms of how the adoption of wage restraint is coordinated among trade unions in these sectors (Johnston et al. 2014; Traxler and Brandl 2012). Austria and Germany have 'pattern bargaining' regimes, in which trade unions and employer organizations in the export sectors—most frequently the metalworking sectors—establish wage settlements that serve as the upper limit for subsequent wage agreements in all the other sectors of the wider economy. Finland and the Netherlands, on the other hand, tend to enact wage moderation through incomes policies/wage pacts with a high degree of 'governability', whereby governments have considerable authority in the determination of sectoral/national wages by being able to impose competitiveness-oriented wage settlements after unsuccessful attempts by the social partners to produce wage moderation. Belgium, finally, has a state-imposed coordination regime, which provides the state with a unilateral role in monitoring wage inflation in line with exposed-sector interests: in Belgium, this is achieved particularly through a law that gives government the capacity to intervene in case wage increases in Belgium are higher than the average of wage increases in its three largest trading partners (France, Germany and the Netherlands).

Have these distinctive wage-setting institution indeed produced favorable ULC dynamics in the CMEs' exposed and sheltered sectors in the years before and after the eruption of the crisis? Table 4.1 shows the evolution in ULC—and its components 'labor productivity' and 'labor compensation'—in different economic sectors. In line with the interpretation of the literature on comparative capitalisms, it can be seen that ULC in the manufacturing sectors—which serve as a proxy for the exposed sectors

Table 4.1 CMEs: ULC and its components in different sectors (in % annual change)

	2001–2007			*2007–2013*		
	Unit Labor Costs	*Gross value added per hour worked*	*Labor compensations per hour worked*	*Unit Labor Costs*	*Gross value added per hour worked*	*Labor compensations per hour worked*
Austria						
Manufacturing	−1.15	3.97	2.78	1.73	1.43	**3.18**
Construction	0.41	1.18	1.59	5.84	−3.8	**1.82**
Business services	0.89	2.07	2.98	2.61	0.57	**3.2**
Public and social	0.22	2.06	2.26	0.4	1.92	**2.73**
Belgium						
Manufacturing	−0.78	4.08	3.26	1.43	1.46	**2.92**
Construction	−0.19	3.41	3.21	2.38	0.47	**2.87**
Business services	0.78	1.86	2.65	3.11	−0.73	**2.35**
Public and social	−0.44	3.13	2.56	0.05	2.06	**2.11**
Finland						
Manufacturing	−3.75	7.05	3.04	4.73	−2.44	**2.17**
Construction	1.82	1.09	2.93	4.01	−0.46	**3.52**
Business services	1.66	1.41	3.1	3.11	0.46	**3.59**
Public and social	1.03	2.07	3.27	1.84	0.74	**2.66**
Germany						
Manufacturing	−2.05	3.98	1.85	1.88	0.45	**2.34**
Construction	1.29	−0.66	0.62	1.6	1.04	**2.65**
Business services	−0.13	0.98	0.84	2.94	−0.16	**2.77**
Public and social	−0.46	0.58	1.03	0.7	1.23	**2.08**
Netherlands						
Manufacturing	−1.05	4.37	3.27	1.44	1.18	**2.63**
Construction	2.14	1.07	3.22	3.76	−1.49	**2.21**
Business services	0.95	1.88	2.84	2.09	0.05	**2.14**
Public and social	0.04	3.03	3.07	0.35	1.33	**1.66**

Sources: OECD: EU KLEMS

(Höpner and Lutter 2014)—declined in every CME between 2001 and 2007, supporting the external cost competiveness of the export-oriented manufacturing firms during these years. Nonetheless, except for Germany, it is less clear that trade unions exercised wage restraint in the other sectors: while in Germany ULC declined in almost every sector, ULC in the other CMEs typically increased in the non-manufacturing sectors—albeit in a relatively tepid pace (compared to the region's MMEs, see Chap. 5). In all these countries, except for Finland, growth in labor compensation in the non-manufacturing sectors was lower than that in the manufacturing sector, suggesting that trade unions in the latter sector were able to establish an upper limit for wage settlements in the other sectors. The observation that labor compensation did not considerably diverge across different sectors points to the key role of labor productivity in shaping the cost competitiveness of firms in these sectors. Indeed, as can be seen by comparing Table 4.1 with Table 5.1, CMEs have generally outperformed MMEs in terms of labor productivity growth both in the manufacturing and non-manufacturing sectors in the years preceding the crisis, suggesting that diverging cost competiveness between these two groups of countries should not merely be linked to diverging wage-setting institutions and labor compensation practices.

Table 4.1. also shows that Germany is an outlier in the group of CMEs in terms of ULC dynamics in the manufacturing and non-manufacturing sectors: ULC in the manufacturing sector declined by more than 2% per year as growth in labor compensation was much lower than productivity growth; in the other, less exposed sectors, ULC declined as well (apart from construction, mostly because of extremely moderate growth in labor compensation). While these data seem to confirm the interpretation that trade unions in the manufacturing sector—particularly IG Metall in the metalworking industries—act as pay trendsetters for the other sectors, it is doubtful that overall ULC dynamics in Germany have ensued from its coordinated wage-setting institutions: the bulk of ULC devaluation was achieved by a combination of wage restraint among trade unions and labor market policy reforms that moved away significantly from Germany's coordinated institutions (Carlin and Soskice 2009; Hassel 2014; Scharpf 2011). Wage restraint was encouraged by several supply-side reforms—Alliance for Jobs and the Hartz welfare reforms—that reinforced jobseekers' willingness to take up even low-paid jobs—particularly in the services sectors (Eichhorst and Marx 2011).[1] While promoting a dualization of the labor market between an 'insider' core of protected,

skilled workers and an 'outsider' segment of low-paid and flexible workers, the flexibilization of the outsider labor market section through these reforms served to protect the interests of the core workers in the export-oriented sectors (Carlin and Soskice 2009; Hassel 2014). As Dustmann et al. (2014) have shown, Germany's manufacturing sector was able to substantially strengthen its cost competitiveness by drawing on inputs from domestically provided services: real wages in these sectors grew much less—and even declined—than in the manufacturing sector. Given that about 70% of inputs in the German manufacturing sector are domestically produced, the repression of labor costs in the service sector was vital in restoring its cost competitiveness.

As such, it should be noted that the sharp decline in ULC in Germany's overall economy cannot easily be linked to its coordinated wage-setting system and pattern bargaining regime. Indeed, Baccaro and Benassi (2014) have demonstrated how German industrial relations have been undergoing a process of erosion and decentralization since the 1980s, thereby affecting the coordination between sectoral and company-level agreements and preventing the redistribution of productivity gains across companies and sectors: 'Sectoral bargaining institutions have become less encompassing, and low bargaining coverage and the opening clauses impair inter-sectoral (and intra-sectoral) redistribution … Works councils have found it increasingly difficult to enforce collective agreements because of the diffusion of opening clauses and of the increase of agency work and subcontractors. These trends are visible even in core manufacturing sectors, showing that the liberalization of industrial relations has reached the core of the German political economy' (2014: 362–363). The fact that labor markets in the other CMEs were not subjected to the same far-reaching reforms could then help explain why labor compensation in the manufacturing and non-manufacturing sectors grew faster in these countries, generating ULC dynamics that were less favorable than those in Germany yet contributing to stronger domestic demand growth.

The question remains whether Germany's extraordinary trade performance—specifically, the fact that its extra-regional trade balance moved to a surplus that became significantly higher than that of the other CMEs—can be connected to these beneficial ULC dynamics. There are several reasons to have strong reservations about this. First, as Fig. 4.4 suggests, Germany's devaluation in ULC does not appear to have been translated into a reduction of producer prices. The graph depicts the low

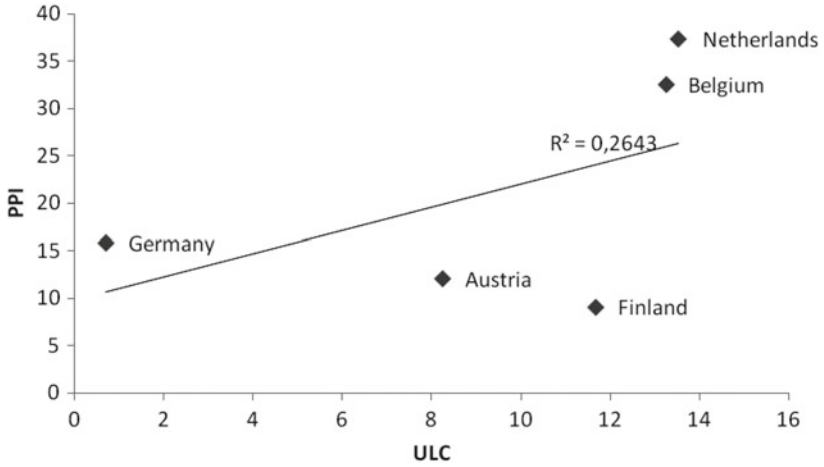

Fig. 4.4 CMEs: correlation between accumulated change in ULC and PPI (2001–2008)
(*Sources:* Eurostat, AMECO)

degree of correlation between the change in economy-wide nominal ULC and the industrial producer price index (PPI) between 2001 and 2008. Germany's PPI increased more than in Austria and Finland, despite the fact that nominal ULC in the latter countries grew much faster than in Germany. Belgium and the Netherlands are obviously outliers in the group of CMEs in terms of PPI growth, which might be explained by the importance of commodity-processing industries around the ports of Antwerp and Rotterdam in these countries: PPI grew faster than average only when the price of oil and non-energy commodities skyrocketed from 2004 to 2008 (Belgium and the Netherlands have the highest degree of energy intensity in industry of the EA-12 due to their specialization in highly energy-intensive chemicals, refined petroleum and metals production; European Commission 2014a, b: 39, 80, 192). It seems, therefore, that manufacturing firms in Germany used moderate wage growth to increase their profit margins rather than passing it onto lower prices. This can be seen even more clearly by comparing the ULC developments in Germany's manufacturing sector with changes in the PPI for exports only (see infra): manufacturing ULC declined by 2.05% per year between 2001 and 2007, yet Germany's export price index increased by an accumulated 5.6% over the same period. As we elaborate below, the disinclination of manufacturing firms in the

CMEs to pass declining ULC onto lower export prices is a reflection of the importance of non-price competitiveness for their trade performance.

Second, as Table 4.2 shows, the favorable evolution of ULC in the total economy—and in the manufacturing sector in particular—does not imply that manufacturing firms in Germany did not experience a decline in their price competitiveness vis-à-vis non-EA producers. Only Finnish firms seem to have translated the ULC devaluation in their sector—and the relatively beneficial economy-wide ULC (compared to the EA's MMEs)—into lower export prices. However, CMEs all experienced an appreciation of their NEER that affected their manufacturing firms' external price competitiveness. Given that national NEER are based on trade weights that include the other EA coun-

Table 4.2 CMEs: ULC, export price index and nominal effective exchange rate

	2001	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Austria								
Nominal ULC	100	100.6	102.0	101.5	102.5	104.0	104.7	108.3
Export price index	100	99.1	98.6	100.3	103.2	104.5	105.6	107.7
NEER	100	102.1	106.4	108.1	107.8	108.2	110.2	112.2
Belgium								
Nominal ULC	100	102.1	103.1	102.5	103.9	106.1	108.4	113.3
Export price index	100	99.8	97.8	105.7	112.2	119.3	122.2	131.3
NEER	100	103.0	108.9	111.0	110.7	111.2	113.3	116.8
Germany								
Nominal ULC	100	100.8	102.0	101.3	100.8	99.0	98.4	100.7
Export price index	100	99.7	99.5	100.1	101.1	102.6	103.7	105.6
NEER	100	103.3	110.4	113.1	112.7	113.3	116.5	120.2
Finland								
Nominal ULC	100	101.1	101.4	101.6	103.9	105.2	105.5	111.7
Export price index	100	94.6	90.6	91.0	92.0	93.6	94.2	94.6
NEER	100	102.7	108.8	111.1	110.7	111.1	113.6	117.5
Netherlands								
Nominal ULC	100	104.8	107.5	107.6	107.3	107.4	109.8	113.5
Export price index	100	97.4	98.0	101.5	111.6	120.1	123.7	136.1
NEER	100	102.8	109.1	111.3	111.0	111.4	113.9	117.5

Source: Eurostat, AMECO, Bruegel database on real effective exchange rates

Note: For the "export price index" the "non-domestic producer price index" was used, which refers to the average price development (converted to local currency) of all goods resulting from an economic activity and sold outside the domestic market

tries, it should be noted that the NEER of these countries underestimates the effect of the euro's NEER (which appreciated by 36.6% between 2000 and 2009) on the price competitiveness of their producers vis-à-vis non-EA producers. Moreover, movements in exchange rates generally have a larger effect on the price competitiveness of these producers than changes in ULC, which usually comprise a relatively low share of their manufacturing gross output price (which is determined relatively more by the cost of their intermediary inputs and profit margins): firms need to adjust their prices relatively more to NEER movements than to ULC changes under the assumption of a complete pass-through of NEER/ULC changes onto prices. While the effect of NEER movements on a firm's export competitiveness depends on the extent to which it uses imports to produce exports, European firms' extra-regional exports generally contain much higher added value than their intra-regional exports (Johnson 2014: 126–127). Studies also found that the exchange rate pass-through on export prices is relatively low in the EA—that is, price setting in the currency of the producer is widespread among firms in the EA economies (Antoniades 2012)—implying that the extra-regional price competitiveness of CME firms was significantly affected by the appreciation of the NEER.

Finally, analyses that aim to link the extra-regional trade balance performance of the CMEs to their distinctive wage-setting institutions need to compare the ULC dynamics in these countries with those in the non-EA world. A comparison between ULC developments in the CMEs with those in the BICs seems especially important, given that trade with these countries has an increasingly significant share—with China in particular—in their extra-regional trade balance. As Fig. 4.5 shows, nominal ULC developments considerably diverged between the BICs countries and the CMEs between 1999 and 2011 (mostly because of a sharp decline in ULC in China and India), which suggests that manufacturers in the CMEs experienced an important decline in their ULC-based cost competitiveness vis-à-vis those in the BICs.

In sum, it is difficult to explain the extra-regional trade balance performance of the CMEs only by pointing to their wage bargaining institutions and ULC developments. In the next section, we discuss the importance of non-price competitiveness and distinctive skill regimes.

Trade Structures, Skill Regimes and Non-price Competitiveness

In the previous section we discussed several reasons why non-price competitiveness might be at least as important as price competitiveness for understanding the extra-regional trade balance performance of CMEs. First, we identified Germany as an outlier in the group of CMEs in terms of ULC

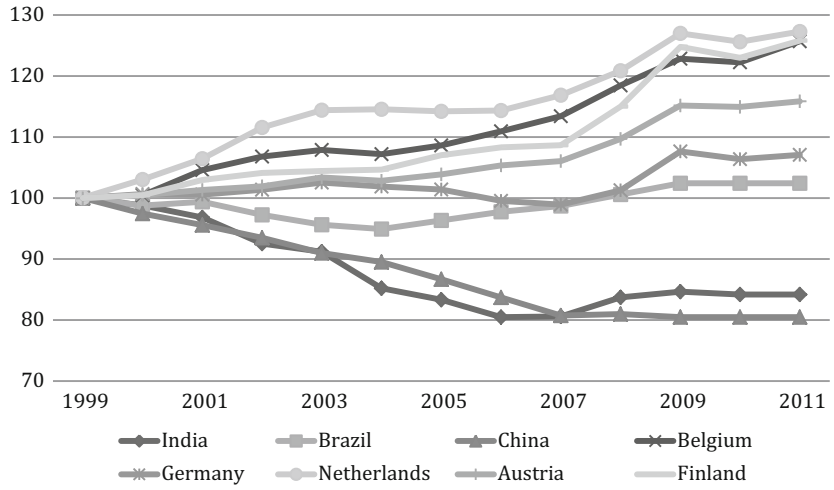

Fig. 4.5 Nominal ULC in the CMEs and the BICs between 1999 and 2011 (*Note:* AMECO; US Bureau of Labor Statistics)

dynamics: ULC declined *both* in the manufacturing and non-manufacturing sectors relatively more than in the other CMEs, where ULC in the non-manufacturing sectors (except in Belgium) generally increased from 2001 to 2007. Second, we pointed to a very weak correlation between economy-wide ULC developments and PPI in CMEs, suggesting that manufacturing firms increased their profit margins rather than passing favorable ULC dynamics onto lower prices. Finally, we called attention to the fact that developments in export price indices and NEER revealed a decline in the extra-regional *price* competitiveness of CME manufacturers, despite the fact that these firms experienced an improvement in their ULC-based *cost* competitiveness. The observation that most CMEs either maintained or improved their extra-regional trade balance in the face of a decline in their price competitiveness vis-à-vis many non-EA countries suggests that especially non-price factors have supported their extra-regional trade balance performance.

A plethora of empirical studies indeed confirm that the price elasticity of exports from the EA's CMEs is relatively low. While Thorbecke and Kato (2012) estimate Germany's ULC-deflated REER to be around 0.6 (implying that a 10% appreciation would reduce exports by only 6%), they note that price elasticities are much higher for its consumption goods

exports than for its capital goods exports and for intra-EMU than for extra-EMU exports. The importance of non-price competitiveness is not restricted to Germany, however. Decramer et al. (2014) found only a small negative effect of ULC on the export performance of Belgian firms with an estimated elasticity of the intensive margin of exports ranging between −0.2 and −0.4, suggesting that pass-through of costs onto prices is limited and/or that demand for exported products is relatively inelastic. Table 4.3 shows the EC's recent estimations of the elasticity of export demand of several CMEs to the REER and foreign demand: exports of CMEs tend to have significantly lower elasticity to REER changes and higher elasticity to foreign demand than exports of MMEs (whose elasticities are shown in Table 5.3). These results were also corroborated by Wierts et al. (2014), who found that the effect of the REER on exports is much smaller for the northern EMU countries than for the southern countries, whereas the effect of partner income is higher—a divergence they attribute to the higher share of high technology goods in these countries' exports.

What are the main sources of the non-price competitiveness of CMEs? As we argued in the previous two chapters, CMEs have escaped competition from the rise of the BICs by profiting from increasing demand for high-quality capital and durable consumer goods that their emergence implies. Figure 4.6 illustrates Member States' UNCTAD's merchandise trade correlation index (MTCI)[2] with the BICs, which integrates data about trade competition and trade complementarity in one aggregate indicator. It shows that the CMEs' export structures have been relatively complementary to the BICs import demand, and with China in particular, especially during the early period of the euro's existence. Particularly Germany has had a trade structure with relatively many products that were in high demand in China (and limitedly produced there).

Table 4.3 Export demand elasticities for selected CMEs (1994–2014)

	REER (export prices)	*Foreign demand*
Austria	−1.67	0.66
Belgium	−0.4	0.73
Germany	−0.81	1.18
Netherlands	−0.47	0.94
CME average	−0.84	0.88

Source: European Commission (2014a, b)

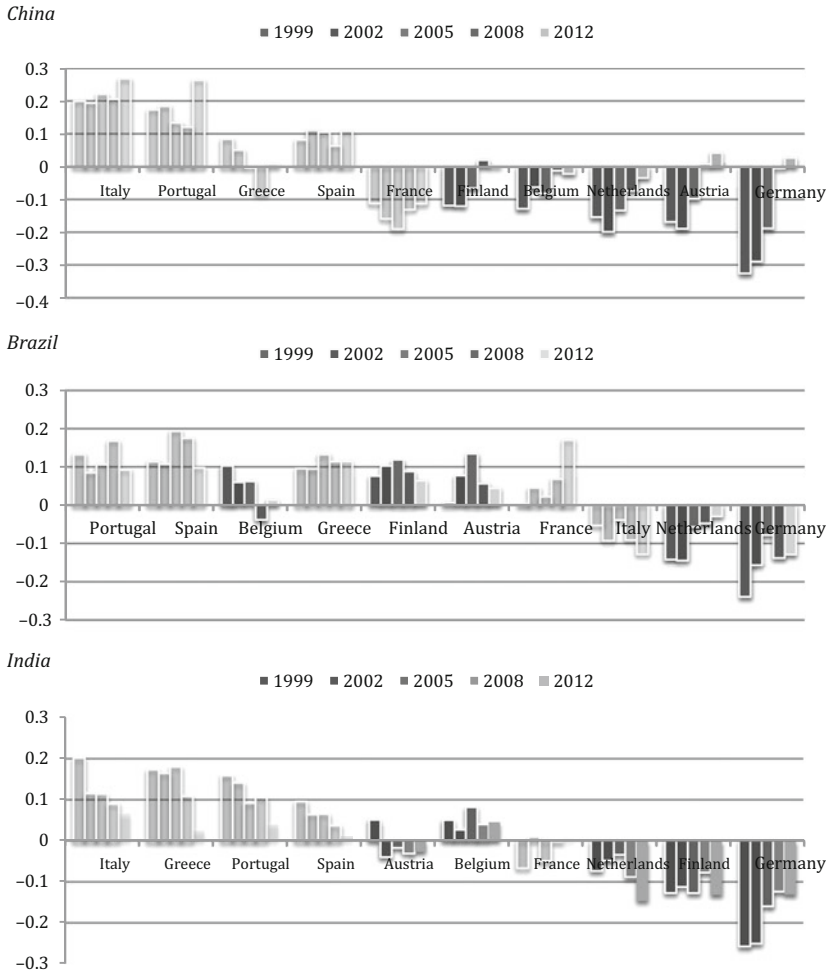

Fig. 4.6 CMEs: trade correlation indexes with China, Brazil and India

However, it can be observed that since 2005 all CMEs' export structures have become less aligned to China's import structure because China is increasingly itself producing more of the products they are specialized in. This is also a reason for concern for the EC, remarking with regard to the very recent period that 'the recession has made China an even more

important market for the EU and [the] EU is selling higher value and more complex products to the rest of the world. This trend also suggests that China is investing heavily in capital goods. While this implies higher export revenues in the short term, it could have a drawback because it might imply a limited time horizon for these types of exports: as China climbs up the quality ladder and becomes increasingly competitive also in medium-high technology products, EU competitiveness might be eroded in those markets' (2013: 11).

The graphs for the CMEs' MTCIs with Brazil and India show similar patterns to the one for China, although the trends are less outspoken. In contrast with China, Brazil and India are becoming much less rapidly a competitor to the CMEs through climbing up the value chain. It is obvious that Germany's export structure has been most compatible with all of the BICs, allowing it to profit from their rise more than any other EA member state.

We will now go into some detail for the five CMEs, highlighting the main (industrial) sectors in which they had a comparative advantage at the time of the introduction of the euro (while always showing data for the automotives and machinery sectors which are the main export categories for the EA, together accounting for 40% of the region's exports in 1999 and 31% in 2013) and discussing relevant trade indicators for these sectors throughout the period for the core EA countries as well as the BICs (detailed indicators can be found in Annex 1). Germany succeeded in keeping a significant industrial base that still contributes 22% to its total value added (7% higher than the EU average) and is particularly specialized in technology-driven and capital-intensive industries (European Commission 2014b: 104ff). In 1999 almost half of German exports was constituted by three product categories (on the 2-digit level of the harmonized system [HS] 1996 classification) representing machinery (84 and 85) and automotives (87). In 2013 these categories still assumed more than 40% of its exports. The other products in which Germany had a comparative advantage are all in the chemicals and pharmaceutical sectors. The BICs have had low RCAs for most of these products. The exceptions are pharmaceuticals (especially generic medicines) and some of the chemical products for India. But most notably, the increase in RCA of China in machinery (HS 84) might pose a threat to Germany in the near future, as has been realized by the EC (see supra). German exports in these products have shown relatively solid growth rates, notwithstanding

that the crisis and the consequent 'great trade collapse' (Baldwin 2009) especially hit the automotives and machinery sectors.

Similar to Germany, Austria's exports are largely composed of machinery and automotives, representing more than 40% of its exports in 1999 and slightly under four-tenth in 2013. The other categories in which Austria has comparative advantages are related to rail- and tramway locomotives and equipment and metals. For the latter, Austria RCAs are more similar to those of Brazil (72 and 83), India (72 and 73) and, especially, China (86, 83, 73 and 76). As applies to Germany, Austria has registered relatively strong annual export growth rates over the period for its most competitive sectors, which translate in a further increase in the RCA scores of these categories in 2013. Finland's most important export sectors have, with the exception of iron, steel and copper, faced rather difficult circumstances in the period 1999–2013 with relatively low or even negative growth. Finland had significant negative export growth for its most comparative advantageous sector in 1999 (ships, 89) and for its by far most important export sector in absolute value that year (electronics, and more specifically mobile phones, 85). Machinery (including electronics) and vehicles accounted for only 25% of its total exports in 2013 from almost 40% in 1999. While the loss of its market share in shipping might be related to the growing strength of the BICs[3] (which all gained considerable comparative advantage in this) as well as the significant impact of the crisis on the sector, Finland's loss of market share in mobile phones is mostly related to the fact that Nokia has been dramatically ousted as market leader by the likes of Apple and Samsung since 2008. However, also in this product category, China's Huawei and Lenovo have become increasingly important contenders.

Machinery and automotives are relatively less important and comparative advantageous export categories for Belgium, representing slightly less than one-third of its exports in 1999. Because of below average export growth in these sectors this share even decreased to under 20% of its aggregate exports in 2013. Belgium has revealed comparative advantages in precious stones, chemicals and pharmaceuticals and iron and steel. It is relatively unaffected by competition from China and Brazil (except for iron and steel from the latter) but has a more similar export specialization structure with India (especially precious stones, but also iron and steel, chemicals and pharmaceuticals). Nonetheless, it recorded strong export growth rates in chemicals and pharmaceuticals that are less subject to (price) competition from emerging markets. Exports to the larger emerging markets have

grown steadily while 'Belgian exporters have also benefited indirectly from new markets through exports to Germany' (European Commission 2014b: 81). For the Netherlands, machinery and automotives are slightly less important categories than for Germany and Austria but more significant than for Belgium, representing more than 35% of its exports in 1999 and slightly less than one-fourth in 2013. It is further specialized in lighting and related consumer electronics (90), chemicals and pharmaceuticals. The Netherlands has comparative advantages in product categories where the BICs are comparatively weak, with the partial exception of chemicals and pharmaceuticals from India and, recently, machinery from China. It has posted strong annual export growth figures, again (as for Belgium) most notably in pharmaceuticals and chemicals.

In sum, an analysis of these trade structures shows that CMEs tend to produce and export those goods in which the BICs do not have a comparative advantage and for which there has been strong demand in these countries. Although the BICs—China in particular—have upgraded their export structure toward higher value-added technology sectors, this does not mean that the export competitiveness of CMEs will unavoidably be undermined. Indeed, manufacturers in CMEs are able to make use of distinctive regimes of skill formation that have promoted quality differentiation, which is a key reason why these firms score relatively well on several dimensions of non-price competitiveness. Based on the specificity and portability of skills as well as on the degree of public commitment and employer involvement, two distinct vocational training systems can be identified in the group of CMEs (Busemeyer 2009; Busemeyer and Schlicht-Schmälze 2014; Culpepper 2007). Austria and Germany have 'collective skill formation systems', in which employer organizations—but also trade unions and works councils—play a crucial role in the governance of vocational education and training (VET). While state actors are also involved, they mostly play the role as moderator. Both these countries are renowned for their dual apprenticeship systems, which are believed to offer a propitious combination of theoretical training in vocational schools and practical training in a firm setting. In these systems, 'the social partners are deeply involved in the corporatist process of devising and reforming curricula for nationally recognized training profiles in more than 300 occupations' (Busemeyer 2009: 394). The 'vocational specificity' of these VET systems is therefore high: these systems are especially apt in generating firm-specific and industry-specific skills that nevertheless provide workers

with a high degree of cross-occupational portability because of extensive mechanisms of authoritative certification of vocational skills.

The other CMEs, on the other hand, have 'school-based occupational systems', in which initial VET is mostly integrated into the secondary school system and students can easily change from the vocational track to higher education. While public commitment to VET is stronger than in Austria and Germany, involvement of employer organizations and trade unions is less extensive. The lower degree of employer involvement in the devising of curricula and certificates for nationally recognized training profiles is compensated by the higher degree of continuation from secondary to tertiary vocational training in these school-based occupational systems. These systems are therefore based on much more general skill profiles than those preferred by employer organizations in Austria and Germany—which is a feature of their VET systems that might be explained by the fact that their employer organizations are dominated by larger firms: as Culpepper (2007) has argued, smaller firms are more cost sensitive than are larger ones and therefore more opposed against funding VET systems that generate broader, less firm-specific, skills. Nevertheless, these more general national skill profiles 'are consistent with being able to train and retrain workers, and this is consistent with an ability [of these larger firms] to react to changes in the international economy' (2007: 622). In addition, firms are encouraged to invest in firm-specific and industry-specific skills through social dialogue and collective bargaining agreements, which usually contain sections that stipulate how much employers are supposed to invest in the continuing vocational training of their work force.

The importance of these VET systems for the competitiveness of manufacturing industries might explain why vocational institutions have been less under attack by employer organizations than coordinated bargaining institutions, which could be seen by underperforming firms as a burden for leading to wage increases exceeding firm-level productivity growth. While there has been a gradual decline of the involvement of smaller firms in VET (both in terms of participation and in terms of training intensity), medium and large firms in the core of the export-oriented German economy remain strongly committed to VET (Thelen and Busemeyer 2008). For these firms the company- and industry-specific skills delivered by these VET systems are indispensable for incremental product innovation, since 'an in-depth knowledge of how a firm operates—of its markets, suppliers and customers—enables employees to continuously improve production processes and to adapt products to specific customer

needs' and since firm- and industry-specific knowledge 'allows employees to work autonomously and to assume responsibility' by rectifying 'mistakes that occur during the production process, which, in turn, contributes to maintaining a high level of product quality' (Herrmann and Peine 2011: 688). Table 4.4 presents several indicators of vocational training in the CMEs, showing that the percentage of secondary education students in vocational programs, the share of enterprises providing training courses

Table 4.4 Indicators of vocational training and innovation in CMEs

	1999	*2005*	*2010*
Austria			
Students in vocational secondary education	70.6	78.5	76.8
Finns providing training as percentage of total	72.0	67.0	87.0
Employees in training as percentage of total	31.0	33.0	33.0
R&D expenditure as percentage of GDP	1.9	2.5	2.8
Patent applications per million inhabitants	134.3	185.1	209.1
Belgium			
Students in vocational secondary education	65.7	69.6	73.0
Firms providing training as percentage of total	70.0	63.0	78.0
Employees in training as percentage of total	41.0	40.0	52.0
R&D expenditure as percentage of GDP	1.9	1.8	2.1
Patent applications per million inhabitants	131.6	144.4	138.3
Germany			
Students in vocational secondary education	64.6	60.3	51.5
Firms providing training as percentage of total	75.0	69.0	73.0
Employees in training as percentage of total	32.0	30.0	39.0
R&D expenditure as percentage of GDP	2.4	2.5	2.8
Patent applications per million inhabitants	255.8	291.0	283.6
Finland			
Students in vocational secondary education	53.2	63.9	69.7
Firms providing training as percentage of total	82.0	77.0	74.0
Employees in training as percentage of total	50.0	39.0	40.0
R&D expenditure as percentage of GDP	3.2	3.5	3.9
Patent applications per million inhabitants	277.0	255.7	256.6
Netherlands			
Students in vocational secondary education	67.3	68.2	67.0
Firms providing training as percentage of total	88.0	75.0	79.0
Employees in training as percentage of total	41.0	34.0	39.0
R&D expenditure as percentage of GDP	2.0	1.9	1.9
Patent applications per million inhabitants	187.6	214.4	182.3

Source: Eurostat; World Bank Indicators

and the fraction of employees participating in vocational training courses stayed more or less at the same level between 1999 and 2012. The same table also shows that CMEs score relatively well in terms of research and development (R&D) expenditures as a percentage of GDP and the amount of patent applications per million inhabitants (for a comparison with the MMEs, see Table 5.4). Using correlation analysis and several variables of vocational training, Makkonen and Lin (2012) indeed found a positive connection between vocational training and innovation: countries where firms invest most heavily in vocational training appear to be those which register the most patents.

Trade Balance Dynamics in CMEs Since the Crisis

As we have seen at the beginning of this chapter, the CMEs entered the crisis with positive trade balances. Table 4.5 shows the changes in trade balances for the core countries since the crisis. As can be seen, the Netherlands, Belgium and Germany have been able to uphold their performances, while Austria's and, especially, Finland's trade balances have deteriorated since the crisis. It is especially remarkable how Germany has succeeded in compensating for the loss of exports to the rest of the EA by high export growth to the rest of the world. Also exports outside of the EA have risen rapidly for Belgium and the Netherlands, which might to some extent be explained by re-exports. The share of the BICs in total exports has risen for all countries and stood at a remarkable 8% (and over 3% of GDP) for Germany in 2013. Austria has been profiting indirectly from this

Table 4.5 Trade balance changes (in p.p.) in the CMEs and their composition (% change) 2007–2013

	Austria	*Belgium*	*Germany*	*Finland*	*Netherlands*
Total	***–1.84***	***0.47***	***–0.80***	***–4.5***	***0.94***
Exports	6.10%	18.47%	9.77	–17.17%	19.59%
Imports	11.08%	18.25%	12.76	–5.10%	20.12%
Intra	***0.06***	***–2.6***	***–2.11***	***–1.25***	***4***
Exports	–2.70%	6.66%	–10.75%	–15.03%	15.24%
Imports	–1.00%	11.68%	0.54%	–26.50%	4.20%
Extra	***–1.91***	***3.07***	***1.27***	***–3.25***	***–3.06***
Exports	15.35%	37.95%	24.85%	–13.20%	25.49%
Imports	28.92%	27.67%	20.60%	–0.50%	32.56%

German success in reorienting exports away from the EA toward the rest of the world and emerging countries in particular. In 2013 about 30% of Austrian exports went to Germany. On the other hand, Austria's relatively high share of direct exports to Central and Eastern Europe and Russia might have negatively affected its trade balance. The very poor performance of Finland results mainly from losses in non-price competitiveness, namely the enormous reductions in export of ships and mobile phones, with annual export losses of the respective 2-digit categories of respectively 20% and 16% between 2007 and 2013. As was recognized by the Finnish central bank governor Erkki Liikanen, Finnish exports have declined by around a fifth since the onset of the crisis, more than in any other advanced economy.

It is, again, difficult to explain the post-2007 extra-regional trade balance dynamics of the CMEs by the evolution of their ULC. As Table 4.1 showed, manufacturing firms in all the CMEs experienced a rise in ULC between 2007 and 2013. This can be explained by the sharp drop in labor productivity in 2009, when many manufacturing firms preferred to hoard labor despite a sharp drop in output as a result of the GFC: average unemployment in the CMEs oscillated near 6.5% between 2007 and 2013. Particularly significant was the performance of Germany, where unemployment was reduced from 8.5% in 2007 to 5.2% in 2013 mainly because German firms were able to use a toolkit of flexible coordinated labor market instruments—such as temporary work time reductions—that enabled them to preserve rather than shed their skilled workers (Reisenbichler and Morgan 2013; see also Hassel 2014). After 2010 ULC in the manufacturing sectors in the CMEs increased as labor compensation outpaced tepid labor productivity growth: gross value added per hour worked in the manufacturing sector grew modestly in Austria, Belgium and the Netherlands, yet remained stagnant in Germany and diminished even further in Finland. So while Finland—and to a much lesser extent Austria—experienced a negative correlation between ULC growth and their trade balance performance, the other CMEs experienced an improvement of their trade balance (or at least upheld their exceptional surplus) *despite* an increase in their ULC. It should be noted, though, that the debt crisis in the EA generated a side-effect that has been advantageous for the extra-regional price competitiveness of manufacturing firms in the CMEs: a lower exchange rate of the euro. Indeed, the comparative specialization of CMEs in the production of relatively price-inelastic goods does not mean that CME firms adopting quality-differentiated production

strategies are entirely inattentive to their price competitiveness, nor that all CME firms engage in these kinds of production strategies.

These rising ULC help explain why CMEs have been very reluctant to adopt internal revaluation measures in order to redress the European trade imbalances. As one of the authors previously argued, the EA's restrictive macroeconomic policy regime—particularly the ECB's orthodox monetary policy framework and its hesitance to engage in substantial amounts of sovereign debt purchases—allowed the CMEs to deflect the burden of adjustment on the MMEs (Vermeiren 2014). The CMEs have also used their creditor power to shape key institutional reforms of the EMU regime in ways that reflected their export interests. The November 2011 'six pack' agreement and the Macroeconomic Imbalance Procedure, which aims to prevent the accumulation of unsustainable external imbalances by forcing deviating member states to adopt the necessary adjustment policies, clearly reflected CME preferences. Apart from envisaging sanctions only for EMU member states running current account deficits, the MIP contains an asymmetry in the quantitative assessment of thresholds: current account surpluses are considered excessive only when they are above 6% of GDP, whereas deficits are deemed excessive if they surpass 4% of GDP. This asymmetric approach was based on the interpretation that 'large and sustained current account surpluses do not raise concerns about the sustainability of external debt or financing capacity that affect the smooth functioning of the EA; the risks of negative spillovers for current account surpluses are … less pressing than for current account deficits' (Council of the European Union 2013).

Nevertheless, the reality of macroeconomic adjustment since the eruption of the EA crisis shows that these persistent surpluses do have important negative spillovers. First, the asymmetric distribution of adjustment costs depressed intra-EA demand to such an extent that both CMEs and MMEs in the region have become increasingly dependent on the attainment of trade surpluses with the extra-EA world to support their growth. Especially the restoration of Germany's trade surplus from 2007 to 2013—with extra-regional trade accounting for more than two-thirds of its surplus in 2013—moved the EA's aggregate current account to a surplus of 2.3% of GDP in 2013, pushing up the euro's exchange rate in ways that undermined attempts of the southern EA countries to move their extra-regional trade balance into a significant and persistent surplus (see Chap. 5). Second, the CMEs' reluc-

tance to adopt internal revaluation measures depressed domestic demand and inflation in these economies, thereby increasing the pressure on MMEs to improve their relative competitiveness by means of outright deflation: by December 2013 the annual inflation rate in the EA averaged 0.9% as inflation had already dropped to 0.6% in debtor countries and to 1.5% in creditor countries (Ubide 2014). These deflationary pressures further inhibited the process of macroeconomic adjustment in debtor countries, as it weakened their debt servicing capacity by increasing real interest rates and the real value of their liabilities as well as by depressing the economic growth necessary to service these liabilities: 'when inflation turns low everywhere in the EA, each unit of deflation/low inflation endured by indebted countries delivers less price adjustment relative to the surplus countries. Or put another way, each point of relative price adjustment must be bought at the cost of greater debt deflation' (Moghadam et al. 2014).

If trade rebalancing in the EA only occurred through a realignment of ULC, it is certainly true that it would be difficult to redress the competitiveness problem of the southern MMEs without the adoption of internal revaluation measures in the CMEs. Estimates by OECD economists suggest that even by 2013 '[f]or Spain and Portugal, the current account balance changes required to reduce net external debt to 35% of GDP over 20 years [require] improvements in cost competitiveness against the rest of the EA of about 30%, and by more than double that for Greece' (Guillemette and Turner 2013: 6). As relying only on unilateral cost adjustment would be neither realistic nor desirable, these economists argue that at least part of the necessary competitiveness adjustments needs to occur in the creditor countries: '[f]or example, a 23% increase in Germany's ULC relative to the rest of the EA is needed to restore German competitiveness to the level prevailing at the creation of the euro' (2013: 6). These gloomy estimates ignore the key role of European monetary policy in encouraging exchange rate depreciation, however. The fall in EA inflation to 0.5% in June 2014 prompted the ECB to implement a new arsenal of unconventional monetary measures: it was the first major central bank to adopt a negative deposit rate of minus 0.1% and launched a new 'targeted' €400 billion LTRO program. In January 2015, the ECB finally announced the launch of its widely expected QE program, consisting of combined monthly purchases of public and private sector securities amounting to €60 billion, intended to be carried out *at least* until the

end of September 2016.[4] These measures, which have contributed to a significant depreciation of the euro, appear to have temporarily deactivated the appreciation bias in the ECB's monetary policy framework. As we explain in the following chapter, this will be more important for rebalancing the MMEs' extra-regional trade than encouraging higher wage inflation in the CMEs.

Notes

1. The most important elements of the Hartz reform package include (1) lowering the level of employment protection primarily by deregulating temporary and part-time employment in the service sector and (2) reducing benefits to the long-term unemployed in order to reduce the reservation wage of job seekers.
2. As UNCTAD explains '[t]rade correlation index is a simple correlation coefficient between economy A and economy B's trade specialization index. The resulting coefficient can take a value from –1 to 1. A positive value indicates that the economies are competitors in global market since both countries are net exporters of the same set of products. Consequently, a negative value suggests that the economies do not specialize in the production/consumption of the same goods, and are therefore natural trading partners. To reduce distortion due to low value trade or insignificant product share (it can produce high index even through economically insignificant), only products that are part of cumulative trade share up to 95% are included in the calculation of the correlation'.
3. Although especially Japan and the Republic of Korea are important competitors in this sector.
4. At the time of writing, the ECB's stimulus measures have been extended in the following ways. First, the ECB has further reduced its deposit rate to minus 0.4%. Second, it decided to increase its monthly purchases to €80 billion and extend its QE program at least until April 2017. Third, the ECB announced a new series of targeted LTROs (maturity of four years, with extremely attractive funding conditions) in order to foster lending.

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CHAPTER 5

MMEs: Outcompeted by Low-Cost Economies

Abstract This chapter discusses the extra-regional trade performances of the MMEs in the context of the rise of the BICs. We show that trade deficits outside of the euro area have until recent years been almost as important as within the region. These negative external trade balances can be related to the very low export shares of the southern member states, especially vis-à-vis the BICs, which also assume a significant role in their external deficits. While labor costs have risen excessively in MMEs and this can be partly explained by the lack of coordinative wage-setting institutions, this has not been fully translated into loss of price competitiveness. The poor export performances of the MMEs and resulting high trade deficits should also be related to non-price competitiveness factors, more specifically their trade structures (poor export composition, quality and geographical orientation) rooted in skill-formation and innovation regimes. Because of these deficient export bases and underlying institutions, the southern euro area member states have been negatively affected by the appreciation of the euro that was reinforced by monetary policies of the BICs as well as by direct competition from the BICs in those products in which they held comparative advantages. After the crisis, Greece, Spain and Portugal have been able to spectacularly reduce their trade deficits. This has succeeded due to a combination of a reduction of intra-regional imports and increase in extra-regional exports. The rebalancing of unit labor costs (ULC) within the euro area cannot sufficiently explain the reduction of the MMEs trade deficits. Rather, the depreciation of the euro seems to have been the driver for the increase in extra-regional exports but should be considered a necessary but insufficient condition for a sustainable recovery.

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Extra-EMU Trade Balance Performance of the MMEs: Broad Empirics

We can observe in Fig. 5.1 that, with the partial exception of Italy, the MMEs have run very significant trade in goods deficits since the introduction of the euro. In the years 2003–2007, the negative trade balance of Greece was above 15% of its GDP, for Portugal it was around 11–12% in the period 2004–2010; while in Spain, it was above 8% in the years 2005–2008. These are impressive trade deficits that were to a significant extent due to negative trade figures outside of the EA. This is most obvious for Spain where trade deficits from outside of the EA have exceeded intra-regional deficits in every year since the introduction of the euro. In Greece, its external deficits have been almost as high as its intra-regional deficits and have exceeded those since 2008. Especially after the crisis, and most notably for Spain and to a slightly lesser extent Portugal and Greece, intra-EA deficits have been spectacularly reduced while extra-regional ones have done so much less. Exports in general and extra-regional exports in particular have become more important for the MMEs, but are still relatively weak, especially in comparison with the CMEs. Except for Portugal, all countries now export more outside of the EA than within the region.

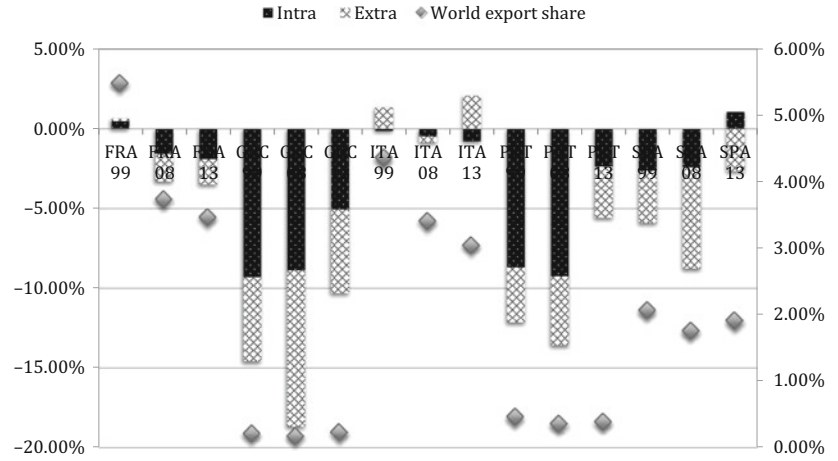

Fig. 5.1 MMEs: trade balances intra- and extra-euro area (lhs) and world export shares (rhs)

However, while the contribution of extra-regional exports to GDP has increased everywhere, especially after the crisis started in 2008, the MMEs are still clearly less export-oriented countries than the CMEs. The share of extra-regional exports in their GDP is currently around 11% for France, Greece, Portugal and Spain and around 15% for Italy, while this is above 20% for Austria and Finland, above 26% for Germany, above 31% for the Netherlands and 44% for Belgium.

As can be seen in Fig. 5.2, the contribution of the BICs to the MMEs' vulnerable negative trade position is significant and has not improved much after the crisis and at least much less than, for example, is the case for Germany, or for intra-EA trade for the MMEs themselves. As is the case for the CMEs, also for the periphery have the BICs become a more important export destination. However, for Greece, Portugal and Spain, the BICs remain a rather small export partner, while also Italy and France are not as present on these emerging markets, China in particular, as Germany is. Thus, not only do MMEs export significantly less in total than the CMEs do (measured relative to their GDP), also do emerging markets figure less prominently among their export destinations, although both figures have been improving. Because of the lower export/GDP ratio in general of the South, the contribution of exports to the BICs to their GDP is signifi-

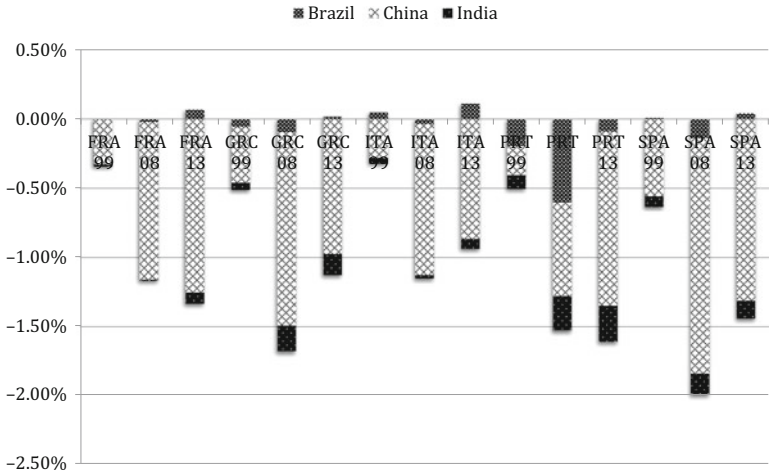

Fig. 5.2 MMEs: trade balances with Brazil, China and India

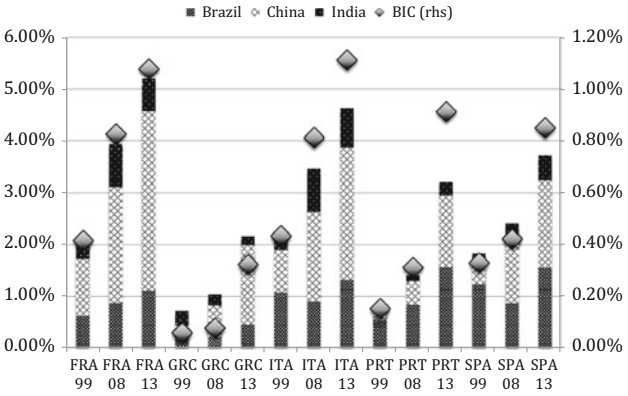

Fig. 5.3 MMEs: share of Brazil, India and China in total exports and GDP (BICs, rhs)

cantly smaller than for the CMEs and only (slightly) above 1% for France and Italy in 2013 (compared with more than 3% for Germany).

Explaining the Extra-EA Trade Balance Performance of the MMEs

ULC Dynamics, Wage-Setting Institutions and Price Competitiveness

How can it be explained that MMEs experienced a deterioration of their extra-regional trade balance between 1999 and 2008 as well as a generally more difficult extra-regional trade rebalancing since the crisis? As we discussed in Chap. 2, existing comparative capitalism analyses of the euro crisis have focused on the growth of the southern EA countries' intra-regional trade deficits, which are explained by the escalation of ULC in these countries and the resulting deterioration of their manufacturing firms' external cost competitiveness (Hancké 2013; Johnston et al. 2014; Johnston and Regan 2014). These analyses draw attention to the fact that ULC have especially grown rapidly in the sheltered sectors of the economy, since external competition is believed to have tempered union wage demands in the exposed sectors. The lack of wage restraint in the sheltered sectors

is attributed to the absence of coordinated wage bargaining institutions, as a result of which trade unions in these sectors were less constrained in pushing for excessive wage increases. Wage hikes in the sheltered sectors produced higher inflation in these countries in a way that undermined the competitiveness of the exposed sectors, leading to an increase in their trade deficits and external liabilities: 'Wage setting regimes where sheltered sector wages are allowed to significantly surpass those in the export sector should witness higher inflation, a less competitive REER, and hence, a trade/current account deficit. This requires greater public *and private* external borrowing to finance the current account deficit' (Johnston et al. 2014: 12–13).

According to these scholars, the introduction of the euro eliminated a key external constraint on the wage demands of the unions in the sheltered sectors. During the 1990s a non-accommodating national central bank kept these demands in check by threatening or responding with contractionary monetary measures in order to meet the Maastricht convergence criteria. The presence of such a national central bank is seen to have been central to the 'governability' of tripartite income and wage pacts, which governments in southern MMEs agreed with representatives of peak-level trade unions and employer organizations as a way to reduce economy-wide ULC and domestic inflation. These governments, assisted by national central banks, therefore played a crucial role in the establishments of social pacts in which trade unions adopted wage restraint to meet the conditions for EMU membership: 'if the social partners agreed to keep wage growth under control and refrained from raising prices, governments would support those disinflationary moves by co-opting labor market parties in major welfare, labor market and budgetary reforms, while central banks would keep interest rates as low as possible; if social partners failed, however, determined governments and central banks would reduce inflation nonetheless, almost certainly with higher social costs' (Hancké 2013: 96). The establishment of EMU, however, reduced the governability of these tripartite agreements: while '[t]he absence of inflationary-reactive national central banks did not affect exposed sector employers because competitiveness pressures continued to constrain their wage strategies', employers in the sheltered—particularly public—sectors 'inherited a less constraining negotiation space with unions that had little to gain from wage moderation' (Johnston 2012: 348). The only MME where ULC were relatively contained during the EMU era was France, where 'moderated wage settlements in large multinational corporations are legally

extended by the Ministry of Labor to the majority of the private sector and are subsequently used as the benchmark by the government in public sector bargaining' (Johnston and Regan 2014: 10).

Does the evolution in sectoral ULC in the MMEs correspond with these analyses? As Table 5.1 shows, apart from France and Portugal, manufacturing firms in MMEs experienced an increase in ULC. This observation corresponds with the findings of Höpner and Lutter (2014), who note that 'the variance of nominal wage pressure [between CMEs and MMEs] was higher, rather than lower, in manufacturing than it was in the overall economy' (2014: 4). While the lack of convergence in ULC dynamics in the manufacturing sectors of these two groups of countries conflicts with the above institutional narrative, the table nonetheless shows that wage growth in the exposed sectors was higher than in the other sectors: wage hikes in the manufacturing sectors therefore seem to have defined the upper limit for wage hikes in the other sectors. The main reason why ULC increased in these sectors in most MMEs needs to be linked to tepid productivity growth rather than to excessive wage increases in these countries. As Hopkin (2015) rightly notes, an empirical analysis of wage growth in the EA suggests that our understanding of the reasons for the loss of competitiveness of the southern MMEs needs to be refined: '[a]lthough ULC did rise faster in the EA periphery than in the core countries, these rising costs did not reflect an unsustainable rise in real wages. Instead, with the exception of Greece, real wage growth in most of the South was only out of line compared to Germany, and remained in keeping with the rest of the EA' (see Tables 4.1 and 5.1 for a comparison). Therefore, a deeper understanding of the decline in cost competitiveness of manufacturers in the southern MMEs requires an analysis of the domestic institutional causes of weak productivity growth rather than union militancy (see below).

Nevertheless, Fig. 5.4 shows that between 2001 and 2008 the correlation between the accumulated increase in economy-wide nominal ULC and the accumulated inflation in manufacturing production prices has been stronger in the MMEs than in the CMEs, suggesting that tradable goods producers in the MMEs might have translated ULC increases into higher prices in order to maintain their profit margins. Taking into consideration that these producer prices include the costs of intermediate inputs as well as profit margins, the question remains to what extent firms in the southern MMEs increased their output prices as a result of ULC increases. As Storm and Naastepad (2014: 9–10) calculated, the relatively low share of ULC in gross output prices in the southern MMEs (Italy, Greece, Portugal and

Table 5.1 MMEs: ULC and its components in different sectors (in % annual change)

	2001–2007			*2007–2013*		
	Unit labor costs	*Gross value added per hour worked*	*Labor compensation per hour worked*	*Unit labor costs*	*Gross value added per hour worked*	*Labor compensation per hour worked*
France						
Manufacturing	–0.72	4.21	3.46	0.97	1.86	2.84
Construction	4.61	–0.96	3.60	4.25	–2.28	1.87
Business services	1.64	1.60	3.27	1.69	0.44	2.14
Public and social	0.15	2.84	2.99	0.95	0.85	1.75
Greece						
Manufacturing	5.05	1.22	6.33	0.97	–1.77	–0.81
Construction	5.09	0.13	5.22	4.41	–0.94	3.43
Business services	2.13	3.60	5.81	2.06	–3.07	–1.08
Public and social	NA	NA	NA	NA	NA	NA
Italy						
Manufacturing	1.70	1.31	3.03	2.19	1.01	3.22
Construction	4.25	–1.32	2.87	4.19	–1.03	3.11
Business services	2.91	–0.23	2.68	2.03	–0.56	1.46
Public and social	0.15	2.5	2.7	–0.42	1.11	0.76
Portugal						
Manufacturing	–0.06	3.51	3.45	–1.67	3.30	1.58
Construction	5.66	–0.65	4.97	–0.11	1.01	0.90
Business services	1.59	0.99	2.60	0.35	0.84	1.19
Public and social	NA	NA	NA	NA	NA	NA
Spain						
Manufacturing	2.53	2.74	5.32	–1.10	3.27	2.14
Construction	7.70	–3.37	4.07	–3.04	7.12	3.86
Business services	3.02	–0.24	2.77	0.94	0.85	1.80
Public and social	0.39	3.5	3.97	–0.22	1.3	1.5

Sources: OECD; EU KLEMS

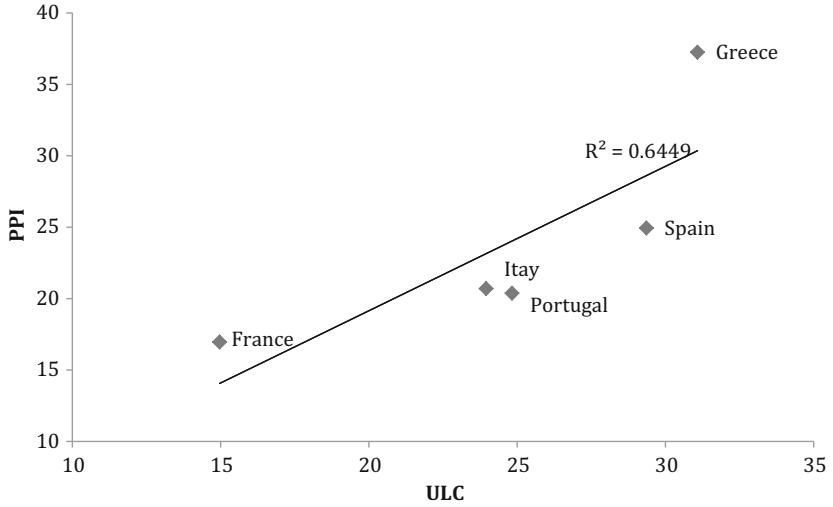

Fig. 5.4 MMEs: correlation between accumulated change in ULC and PPI (2001–2008) (*Source:* Eurostat, AMECO)

Spain) implies a relatively low elasticity of output prices to labor costs: in 2005, ULC 'make up only about 16% of the manufacturing gross output price, whereas intermediate input costs account for 72% of total costs and the profit share is 12%. If ULC increase by 1 percentage point, the gross output price increases by just 0.18% when we assume the complete "pass-through" of higher labor costs onto prices.' Such a low ULC-elasticity of producer prices helps explain, as Storm and Naastepad (2014: 10) note, why statistical evidence on the inverse relationship between export growth and the growth of ULC in these countries is overwhelmingly weak. Based on the estimation of a panel data analysis over 1975–2011 for 13 EA countries, Sanchez and Varoudakis (2013) found that 'for the periphery, the contribution of ULC changes to external imbalances appears negligible' (2013: 17). In their wide-ranging study of the main sources of the external imbalances in the EA, Chen et al. (2013) also point to the role of extra-regional shocks rather than intra-regional divergences in ULC.

According to the latter study, one of the key extra-regional shocks contributing to the trade deficits of the MMEs was the nominal appreciation of the euro: '[w]hile relative price movements within the [EA] contributed

to the debtor countries' real exchange rate appreciations, the lion share of the appreciation between 2000 and 2009 was accounted for by the nominal appreciation of the euro vis-à-vis other currencies' (Chen et al. 2013). Indeed, as Table 5.2 shows, the appreciation of the NEER in the MMEs was either higher than or about equal to the growth in non-domestic producer (i.e., export) prices. Again, it should be noted that these national NEERs are based on trade weights that include the other EA countries, and therefore underestimate the effect of the euro's 36.6% NEER appreciation between 2000 and 2009 on the price competitiveness of the tradable goods producers vis-à-vis non-EA producers. It is also important to reiterate that movements in exchange rates generally have a larger effect on the price competitiveness of these producers than changes in ULC, which usually comprise a relatively low share of their manufacturing gross output price (which, as noted above,

Table 5.2 MMEs: ULC, export price index and nominal effective exchange rate

	2001	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
France								
Nominal ULC	100	102.8	104.9	105.7	108.0	110.0	111.7	115.0
Export price index	100	101.4	101.1	103.1	106.6	109.0	110.7	114.5
NEER	100	102.9	109.0	111.3	110.9	111.4	113.9	117.3
Greece								
Nominal ULC	100	109.9	111.0	112.8	123.1	121.7	124.8	131.1
Export price index	100	101.1	100.8	105.9	109.8	115.1	118.6	126.2
NEER	100	102.8	109.5	111.9	110.8	111.2	113.4	116.9
Italy								
Nominal ULC	100	104.1	109.1	111.7	114.0	116.5	118.8	124.0
Export price index	100	99.6	98.8	99.7	101.8	104.0	106.3	109.3
NEER	100	103.4	109.7	112.1	111.6	112.2	114.8	118.0
Spain								
Norruml ULC	100	103.1	106.4	109.5	113.4	117.3	122.2	129.4
Export price index	100	99.3	97.8	99.8	105.6	109.9	112.0	115.1
NEER	100	103.0	108.1	109.9	109.5	109.9	111.8	114.7
Portugal								
Nominal ULC	100	101.1	101.4	101.6	103.9	105.2	105.5	111.7
Export price index	NA	NA	NA	NA	NA	NA	NA	NA
NEER	100	101.8	105.6	106.9	106.7	106.9	108.4	111.0

Source: Eurostat, AMECO, Bruegel database on real effective exchange rates

Note: For the "export price index" the "non-domestic producer price index" was used, which refers to the average price development (converted to local currency) of all goods resulting from an economic activity and sold outside the domestic market.

is determined relatively more by the cost of their intermediary inputs and profit margins): firms need to adjust their prices relatively more to NEER movements than to ULC changes under the assumption of a complete pass-through of NEER/ULC changes onto prices. For these reasons, the nominal appreciation of the euro has been a much more important contributing factor to the decline in the extra-regional price competiveness of manufacturing firms in the MMEs. It is clear, therefore, that the deterioration in the extra-regional trade balances of the MMEs cannot easily be attributed to their relatively higher ULC growth.

However, this does not mean that the relatively higher growth in ULC was entirely inconsequential to the extra-regional trade balance performance of the MMEs. As we noted in the previous chapter, the adoption of wage restraint by unions in the CMEs increases the profit margins of manufacturing firms in these countries, thus supporting their capacity to cut product prices in response to a nominal appreciation of the euro. Although CME firms generally do not appear to have passed the appreciation of the euro onto lower export prices because of their strong non-price competitiveness, price competitiveness is much more important for MME firms that tend to produce goods with a high price elasticity (see below). In this respect, Antoniades' (2012) finding that the exchange rate pass-through on export prices is relatively low in the EA—therefore in both CMEs and MMEs—needs to be understood against the background of rising ULC and decreasing profit margins for many MME firms: as the price competitiveness of these firms was weakened by *both* an increase in ULC and a nominal euro appreciation, the low exchange rate pass-through on export prices can be related to the possibility that these firms had already reduced their profit margins in reaction to the rise in ULC and were therefore unable to cut prices and further reduce profit margins in response to the nominal euro appreciation. Another reason why rising ULC might have affected the extra-regional trade balance performance of the southern MMEs more is that firms in these countries experienced a sharp appreciation in their ULC-adjusted real exchange rate vis-à-vis the BICs, as ULC increased much faster in the former countries than in the latter and therefore amplified the effect of the nominal euro appreciation against the BIC currencies on their price competitiveness vis-à-vis BIC producers (see Fig. 5.5). As we elaborate below, the decline of the southern MMEs' price competitiveness vis-à-vis the BICs was all the more problematic in light of the more competitive trade structures between these countries.

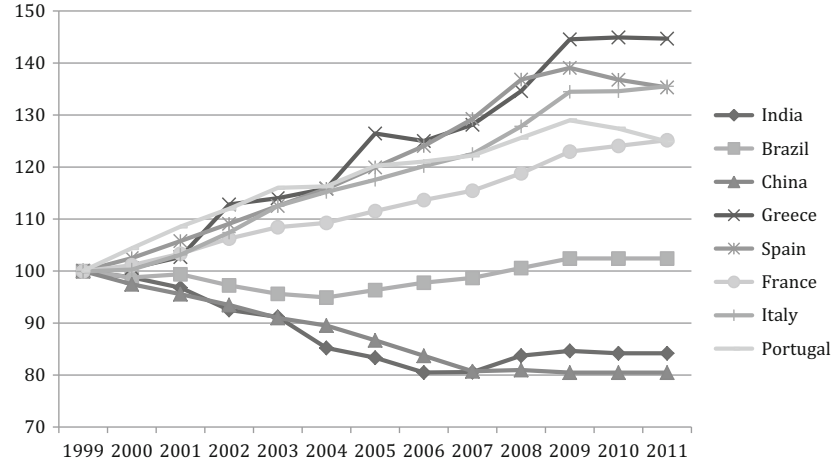

Fig. 5.5 Nominal ULC in the MMEs and the BICs between 1999 and 2011 (*Note:* AMECO; US Bureau of Labor Statistics)

Trade Structures, Innovation Regimes and Non-price Competitiveness

In the previous section we argued that the disadvantageous evolution in ULC in various economic sectors in most MMEs—France excluded—should be connected more to weak productivity growth than to wage militancy of trade unions in the sheltered sectors. This is particularly problematic in the manufacturing sectors in the southern MMEs, where strong productivity growth usually needs to compensate for the effect of wage increases on the cost competitiveness of manufacturing firms. We also suggested that the increase in production prices in these countries might be linked to the relatively high growth of economy-wide ULC, although we also pointed to the low ULC-elasticity of producer prices due to the relatively low share of labor costs in gross output prices. Finally, we noted that the nominal appreciation of the euro between 2001 and 2009 was generally more important to the decline in price competitiveness of tradable goods producers in MMEs vis-à-vis non-EA producers. Two conclusions can therefore be drawn from the previous section. First, the sharp corrosion of the price competitiveness of the MMEs might be at least as important for understanding the deterioration in their extra-regional trade

balances, yet goes beyond the detrimental evolution in economy-wide ULC and should be attributed at least as much by external factors such as the evolution in the nominal exchange rate of the euro. Second, the importance of price competitiveness for explaining why the extra-regional trade balances of the MMEs deteriorated much more than those of the CMEs points at least as much to their weak non-price competitiveness. Indeed, as Table 5.3. shows, exports by MMEs are much more price-elastic and much less stimulated by foreign demand than exports by CMEs (see Table 4.3 for a comparison). As we elaborate in this section, the weaker performance of the MMEs in terms of non-price competitiveness can be connected to their particular anomalistic trade specialization structures and more dysfunctional innovation regimes.

An important explanation for the weak export performance of the MMEs can be found in the export structures of MMEs, which—compared to those of the CMEs—are less complementary with the import demand of the emerging economies and more in competition with their exports, as Fig. 5.6 shows.[1] Particularly in the first years of the existence of the euro competition from China on export markets was higher for the MMEs than for CMEs. At the same time, however, it should be noted that competition with China has increased less strongly during the period for the MMEs than for the CMEs. The MTCI's between the MMEs and Brazil and India show similar patterns. Again, competition from Brazil and India has been high for Portugal, Spain and Greece. Italy has suffered from competition with India but much less from Brazil, with which it has a more complementary export structure. Apart from growing competition from Brazil, France's trade structure seems to have suffered least from competition from the BICs among the southern EA member states.

We will now go into some detail for the five MMEs, looking at their main manufacturing export categories at the time of the introduction of

Table 5.3 Export demand elasticities for selected MMEs (1994–2014)

	REER (export prices)	*foreign demand*
France	–1.44	0.37
Italy	–2.56	1.18
Portugal	–2.14	0.92
Spain	–1.61	0.66
MME average	–1.94	0.78

Source: European Commission (2014)

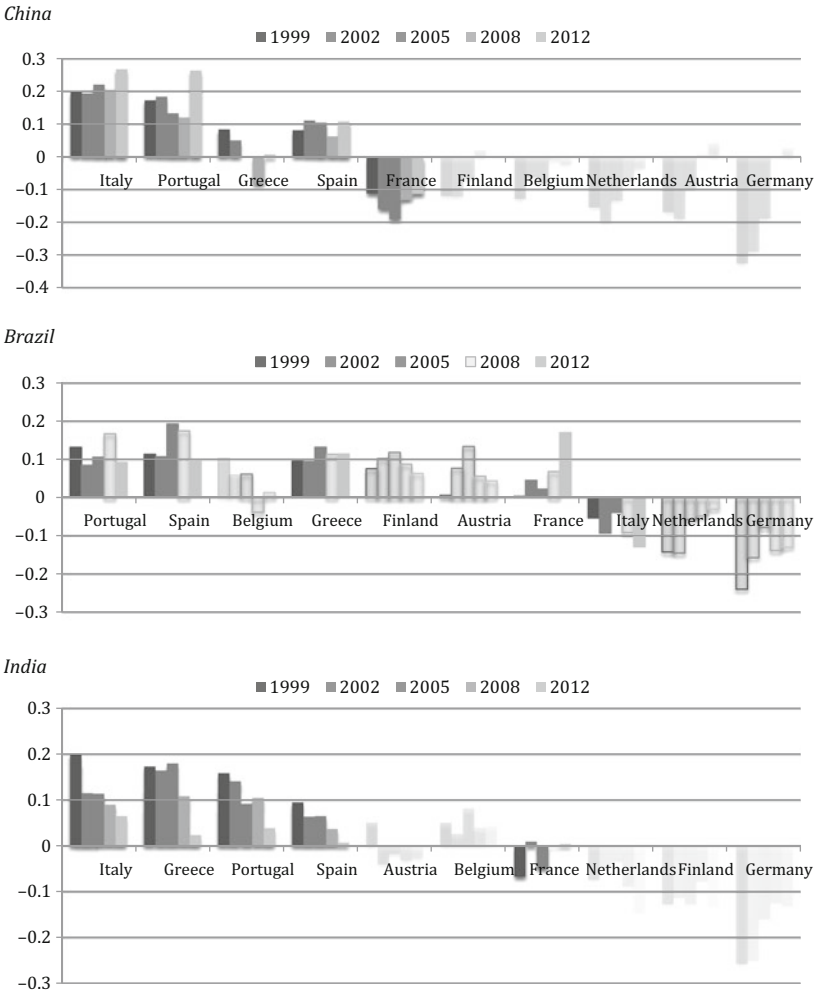

Fig. 5.6 MMEs: trade correlation indexes with China, Brazil and India

the euro, how these evolved over the period and how this interacted with the rise of the BICs.

As can be seen in Annex 2, in terms of specialization structure, France's top export categories (both measured by revealed comparative advantage and as share of total exports) resemble those of CMEs. Machinery (84,

85) and automotives (87) assumed almost 40% of its exports in 1999 but (due to low export growth for these categories) this decreased to less than 30% in 2013. This cannot be explained by depressed global demand for these products in general, but seems to indicate that French products in these categories have not succeeded in profiting from exports toward rapid growth markets to the same extent that German producers have. The other top comparative advantage categories, belonging to the sectors of chemicals and pharmaceuticals and aircraft, recorded higher annual growth rates. Only some of France's top export categories have been in (modest) competition with the BICs, namely chemicals and pharmaceuticals with India, and iron and steel and aircraft with India and, especially, Brazil and, of late, also machinery with China. In general, as could also be seen in Fig. 5.6, France's (top) trade correlation with the BICs tends more toward those of the CMEs than of the MMEs. Thus, France's weaker performance should be sought especially at the export side, having been relatively unable to capitalize on the rise of EMEs. Indeed, Kabundi and Nadal De Simone (2009) have noted that French export performance in the 2000s lagged behind its own past record and compared with that of Germany over the same period. They concluded that '[t]raditional variables that explain international trade, such as the exchange rate, relative unit labor costs, and demand pressure seem insufficient to illuminate the recent decline in France's export performance' (2009: 3) but that rather 'France's weaker export performance in the 2000s is reflected both in terms of geographical destination and in terms of product composition' (2009: 13). A study by the French ministry of finance came to the same conclusion: '[d]ue to the geographical structure of its exports, France has not yet benefited fully from the vigor of emerging countries in world trade since 2000' (Ministry of the Economy, Finance and Employment 2007: 2). They found that export growth of France has been especially weak in China, Taiwan and India.

Italy's specialization structure looks like a mix between those of CMEs and MMEs. On the one hand, machinery and automotives assumed more than 37% of its exports in 1999, and still almost 33% in 2013. On the other hand, it has comparative advantages in textiles, footwear, stones and furniture similar to other Southern EA states. Overall, Italy showed low compound average growth rates for its entire top export categories as for its exports in general. This could be related to the fact that it faces strong competition from China for all its top five manufacturing export sectors in terms of RCA, and also from Brazil and India in footwear (64) and stone

(64 and 68, and 69 for Brazil). However, it has been noted that Italy has had a consistent and significant trade surplus in manufacturing and that Italy is still especially competitive in the 'four F's': Food and wine, Fashion and luxury, Furniture and building materials and Fabricated metal products, machinery, plastic and rubber products (Fortis 2015). As might be also the case for France, the Italian economy seems to be divided into some high-performing, high-quality and high added value industries that have been largely shielded from the appreciation of the euro and competition from emerging economies and some other industries that have performed much less good (and are often not involved in exports at all), which resulted overall in rather anemic export growth rates both before as well as after the crisis. In Italy, this divide is clearly geographically organized, with the better performers located in the industrial districts in the North. Within this group is a significantly high share of 'specialized suppliers' similar to the successful Mittelstand in Germany (Tiffin 2014). Interestingly, this study also finds that while Italy remains at the top of the global quality ladder across all its major exports and its exporters have been performing well in those niches, Italy's exports have grown below the EA average because of the country's mix of trading partners and the bundle of goods that it exports, a conclusion to which also the Italian Trade Agency came: 'the reduction of the Italian [export] share derived mainly from the characteristics of Italy's model of export specialization, tilted towards products in relatively slow-growth sectors of world demand' (ITA 2013: 15). Di Maio (2014) argued that the Italian economy has suffered from two anomalies in the past decades: besides a firms' size distribution anomaly also a 'trade specialisation anomaly' as '[w]orld trade is rapidly evolving but Italy is stuck with its traditional structure of comparative advantages, marked by strong specialization in sectors which in the last years have become less and less sophisticated, and, thus, less and less able to sustain growth' (Ibid.: 237).

The same general observations for Italy also apply to Spain. It has had a quite strong presence in automotives and machinery, with more than 40% of its exports belonging to these categories in 1999 and more than 30% in 2013, but at the same time has been specialized in stones, footwear and furniture. Export growth in these sectors has been relatively weak. This can be related to strong competition from China in four of its five manufacturing product categories in which it had the highest revealed comparative advantages in 1999, and also from India and Brazil in footwear and stone.

But it is clearly Portugal and Greece whose comparative advantage structures as they stood at the beginning of the monetary union have been

most shaken up by the rise of the BICs. Portugal has a relatively significant export presence in automotives and machinery, which together assumed one-third of its exports in 1999 and about one-fifth in 2013. But its five main comparative advantages at the time of the introduction of the euro were all in textiles and footwear or ceramic products. In 1999, more than a quarter of Portuguese exports were still in the textiles and footwear sectors. In these categories Portugal experienced very low or even negative growth rates. This can be ascribed to strong competition in all of these products from China and India (except for ceramic products) and, to a lesser extent, Brazil. For Greece, exports of machinery and automotives have been relatively insignificant, at slightly less than one-tenth of its total exports in 1999 and under 7% in 2013. Greece's main comparative advantages in the year of the introduction of the euro were in textiles and clothing, metals and stones. Especially in the textiles and clothing categories Greece faced tough competition from the BICs, resulting in a significant decrease of its exports in apparel and clothing (61). In sum, the specialization in textiles and clothing and the competition in these sectors from China, and other emerging and developing economies, have been highly problematic for Portugal and Greece. In the period 2000–2009, imports in these sectors in the EU from the rest of the world increased in value by almost 22% while exports decreased by 6% (European Commission 2011: 13).

These findings correspond with a study of the IMF (Moreno et al. 2008) on the southern MMEs' competitiveness before the outbreak of the crisis, which also found that weak export performance of these countries can be related to their export structure: 'Italy, and to a lesser extent Spain, Portugal and Greece, had a sectoral specialization that was inversely related to subsequent nominal growth in "global" trade in these sectors' (Ibid.: 23). To be sure, the technological upgrading of these economies has been underway but from a (very) low level and at a slower pace than in other countries. Partly related but different from the technological content of their production, the IMF study also found that these southern MMEs have neither substantially increased the *quality* of their exports from the mid-1990s to the mid-2000s (Ibid. 2008: 39ff). In the 'Atlas of Economic Complexity', a collaborative effort of economists at Harvard and MIT (Hausmann and Hidalgo 2014), it is shown that Portugal and Greece are the worst performers in Western Europe in terms of their 'Economic Complexity', which measures the amount of productive knowledge that is implied in their exports structures. As the authors remark, this implies that 'the two countries' […] high income cannot be explained by either

their complexity or their natural resource wealth. We do not think that this is unrelated to their present difficulties: their current income has been propped up by massive capital inflows and, as these declined to more sustainable levels, the internal weaknesses come to the fore' (2014: 73).

The observation that firms in MMEs are less likely to adopt quality-differentiated and high added value production strategies reflected in their trade specialization structure than firms in CMEs can be attributed to key institutional differences in national innovation regimes, which are generally more dysfunctional in the former group of countries than in the latter. As Table 5.4 shows, the MMEs generally score much less well in terms of several indicators of vocational education and training and innovation than the CMEs (for a comparison, see Table 4.4). Especially the southern MMEs invest much less in vocational education, with a much lower share of students enrolled in vocational education programs and a significantly lower share of employers offering VET programs and employees engaged in such programs. Moreover, it should be emphasized that the MMEs' lower scores on VET indicators do not enclose any information about the quality of VET in these countries. In France and Italy, for instance, 'vocational schools are simply a way in providing education for low-ability students and have limited ability in occupationally useful skills' (Breen 2005: 126). The fact that the public and private sector in MMEs invest much less in VET than in CMEs also seems to be correlated with a much lower share of research and development expenditure as a percentage of GDP, culminating in a significantly lower amount of patent applicants in these countries: the only MME that comes anywhere close to meeting the lower bound of the CMEs on these indicators of innovation is France.

In the comparative capitalism literature the lack of performance of the MMEs in terms of VET and innovation is generally attributed to the weak collective bargaining structures in these countries: in the southern MMEs, 'wage bargaining is difficult to coordinate because trade unions are relatively strong but vie with one another for the allegiance of the workforce and the right to negotiate wage bargains … Employer associations are sometimes more coordinated, but they were less deeply institutionalized than their northern European counterparts and poorly equipped to operate collaborative vocational training schemes' (Hall 2014: 1226). Partly for these reasons, 'larger segments of the workforce are less skilled and continuous innovation is more difficult to achieve than in the north. Firms are correspondingly more inclined to build their competitive advantages on low-cost labor' (Hall 2014: 1226; see also Molina and Rhodes 2007).

Table 5.4 Indicators of vocational training and innovation in MMEs

	1999	*2005*	*2010*
France			
Students in vocational secondary education	57.2	56.4	44.3
Firms providing training as percentage of total	76.0	74.0	76.0
Employees in training as percentage of total	46.0	NA	45.0
R&D expenditure as percentage of GDP	2.2	2.1	2.2
Patent applications per million inhabitants	119.8	133.5	130.4
Greece			
Students in vocational secondary education	25.8	36.0	30.7
Firms providing training as percentage of total	18.0	21.0	28.0
Employees in training as percentage of total	15.0	14.0	16.0
R&D expenditure as percentage of GDP	0.6	0.6	NA
Patent applications per million inhabitants	4.8	10.0	5.8
Italy			
Students in vocational secondary education	63.5	61.5	60.0
Firms providing training as percentage of total	24.0	32.0	56.0
Employees in training as percentage of total	26.0	29.0	36.0
R&D expenditure as percentage of GDP	1.0	1.1	1.3
Patent applications per million inhabitants	65.6	84.8	75.3
Spain			
Students in vocational secondary education	31.2	42.6	44.6
Firms providing training as percentage of total	36.0	47.0	75.0
Employees in training as percentage of total	25.0	33.0	48.0
R&D expenditure as percentage of GDP	0.9	1.1	1.4
Patent applications per million inhabitants	18.4	31.4	32.1
Portugal			
Students in vocational secondary education	25.0	31.0	38.8
Firms providing training as percentage of total	22.0	44.0	65.0
Employees in training as percentage of total	17.0	28.0	40.0
R&D expenditure as percentage of GDP	0.7	0.8	1.6
Patent applications per million inhabitants	3.7	11.7	8.9

Source: Eurostat; World Bank Indicators

These weak collective bargaining structures have also aggravated the dualization of the labor market, which is much more pronounced in the southern MMEs than in the CMEs and weakened the non-price competitiveness of their manufacturing firms. In contrast to CMEs, where protection for standard employment promotes investments in firm-specific and industry-specific skills and is a component of a training system conducive to upskilling and low youth unemployment, stringent employment protection for the 'insiders' in the southern MMEs' labor markets produced

a large amount of 'outsiders' that are essentially barred from vocational training, This is particularly problematic given the high amount of low-skilled workers in these countries: in 2006, the share of working-age population with low educational attainment was much higher in Portugal, Spain, Italy and Greece than the EU-25 average (69.4%, 42.7%, 39.3% and 35.5%, respectively, against 24.8%). As such, the southern MMEs 'have not yet managed to reverse the comparative disadvantage that results from a low educated labor force', making it more difficult to upgrade their production systems (Karamessini 2008: 526).

One of the key problems affecting the competitiveness and innovating capacities of manufacturing firms in MMEs has been the changing role of the state, which diminished its capacity to solve the coordination problems between business and labor (Schmidt 2012). Piecemeal liberalization and deregulation of industrial relations and financial systems have increased the hybridization of the MME model of capitalism, which refers to a 'process whereby neither market-based (LME-type) coordination nor strategic (CME-type) coordination prevails across the economy and across institutional spheres, as a consequence of incoherent institutional change' (Simoni 2012). Institutional changes in the large MMEs—Spain, Italy and France—show that the generally dismal performance of their manufacturing firms in terms of non-price competitiveness and innovation needs to be understood against the backdrop of declining institutional complementarities between their financial systems, industrial relations and regimes for VET and innovation.

The Spanish financial system, whose mounting market-based liabilities were channeled to the construction sector through mortgage loans and loans to property developers rather than to the manufacturing sector in the years preceding the crisis (Quaglia and Royo 2014), 'has been linked to endemically poor labor market performance through the mediating mechanism of restricted lending to small and medium enterprises (SMEs), thus undercutting the ability of such firms to increase employment or invest in innovation' (Fishman 2012: 70–71). At the same time, 'the small size of most Spanish companies makes it difficult for them to generate the collective goods that they need to compete successfully. While most employ production strategies that require a relatively skilled labor force, they do not have strong incentives to invest in training because they are vulnerable to "poaching" of skilled workers by other firms' (Royo 2007). In addition, 'it is more difficult for the Spanish state to provide direction in VET than in other parts of the education system, as it relies on

concerted action with other stakeholders (most notably employers and trade unions) to make reforms work' (Souto-Otero and Ure 2012).

Italy is a classic example of how poor economic and trade performance should be linked to problematic evolution of labor productivity rather than to wage militancy by trade unions in the non-tradable goods sector: average annual increase of labor productivity slowed from 1.86% in the period 1992–1996 to 0.95% in the 1996–2000 period, and came close to zero in 2000–2004 (Lucidi and Kleinknecht 2010). This trend needs to be attributed to the increased hybridization of the Italian model of capitalism, which over the past 25 years underwent a series of indecisive reforms that—as Simoni (2012) has convincingly argued—failed 'to push the system toward specialization in either class of sector characterized by incremental or radical innovation' (2012: 26). Once the financial sector reforms in the beginning of the 1990s paved the way for a large-scale wave of privatization, mergers and acquisitions in the banking sector, the increased distance between bank headquarters and the operating venues of SMEs drained the supply of loans to SMEs wanting to invest in innovation. Incremental innovation in the Italian manufacturing sector has also been hampered by institutional changes in the labor market. While the 1992–1993 income pacts established coordinated wage-setting at the national level, the subsequent deregulation of non-standard employment deepened the cleavage between insider and outsider workers in ways that undermined the incentives toward the acquisition (and within-firm development) of firm- or industry-specific skills for newly hired workers. Econometric analysis by Lucidi and Kleinknecht (2010) confirms a link between labor market flexibilization and decline in labor productivity: firms employing high shares of temporary labor in 2001 (or experiencing a higher labor turnover in 2001) had significantly lower rates of labor productivity growth during 2001–2003.

Although France is generally considered to be the most successful MME (Schmidt 2012), the deterioration of its trade balance also reflects a decline in competitiveness that can be related to institutional changes in its financial sector, industrial relations and VET system (Amable et al. 2012; Culpepper 2008). State-led liberalization of the financial system increased the importance of equity markets, thereby precipitating a replacement of interlocking shareholdings among large firms by the growing weight of foreign institutional investors as well as increasing the autonomy of French managers in developing their business strategies. Goyer (2002) has argued that the resulting shift from an 'insider' to an 'outsider' model

of corporate governance among large firms encouraged neither incremental nor radical types of innovation and explains why foreign takeovers became a critical mechanism for French firms to build their innovative capabilities. Due to the weak collective capacities of French trade unions and employer associations, the scope of firm-level bargaining in French industrial relations accelerated during the 1990s. Labor market flexibilization in a context of general distrust between managers and workers was not conducive to improvements in innovation, productivity and quality differentiation through skill enhancement among rank-and-file workers (Boyer 1995). The skill problem was exacerbated by changes in the French system of education and training, which 'reveals most clearly how decentralized decisions by uncoordinated economic actors have undermined the mechanisms of state coordination without being able to replace them' (Culpepper 2007). Reforms attempting to bring about a substantial increase in the degree of employer investment in vocational training were, for instance, hampered by the inability of employer associations to provide information about future skill demands. These problems help to explain why most French manufacturers still compete via cost reductions and are mainly price-takers on external markets: a recent study by the French ministry of finance connected the deterioration of the French trade balance to the relatively mediocre positioning of France on non-price competitiveness determinants (DG Trésor 2014).[2]

Trade Balance Dynamics of MMEs After the Crisis

We have seen at the beginning of this chapter that the trade balances of all the MMEs, but most importantly Spain, Portugal and Greece, had deteriorated significantly over the period 1999–2008. The extreme trade deficits of Portugal and Greece are consensually perceived as one of the key factors leading to their respective debt problems and consequent bailouts. The adjustment programs that have been imposed on them in return aim to adjust these trade imbalances, allowing them to record trade surpluses in the future so that they can repay their external debt and grow more sustainably. Similar but less radical policy programs have been prescribed for the other MMEs through the conventional cycle of the European Semester and, in the case of Italy and Spain, also informal pressure from the ECB, which has demanded reforms as preconditions for unconventional monetary support. These reforms consist of measures to restore the external competitiveness of their economies through an internal devaluation of

ULC. Deficit countries have been forced to reduce their fiscal deficits by adopting austerity measures that have increased unemployment, which has reduced wage inflation. These countries have also been directed to push through far-reaching labor market reforms—such as changing 'the degree of centralization' of wage bargaining settings, abolishing 'the indexation mechanisms', and ensuring that 'wages settlements in the public sector support the competitiveness efforts in the private sector' (European Council 2011). As a result of these adjustment pressures, the MMEs have moved closer toward a fragmented and decentralized model of collective bargaining (for an overview of major changes in national collective bargaining systems, see Schulten and Müller 2014). These measures have been effective in reducing the relative ULC for Greece, Portugal and Spain by, respectively, 11.7%, 3.6% and 4.9% between 2010 and 2014. France's and Italy's relative ULC, on the other hand, increased further over the same period by 4.9% and 4.6%.[3]

To what extent has the external adjustment of MMEs since the crisis succeeded? Table 5.5 shows the changes to the trade balances over the period 2007–2013. As can be seen, except for France, the trade balances of the MMEs have improved, and spectacularly so for Portugal (6 percentage points), Greece (7 percentage points) and Spain (8 percentage points). In the case of Spain and Greece, internal rebalancing exceeds external rebalancing, while in the case of Portugal the entire adjustment has been intra-regional. In the case of Spain and Greece, the reduction in imports has been slightly higher than the increase in exports, while in Portugal improvement in exports has been responsible for three quarters of the rebalancing.[4] It is also remarkable that intra-regional rebalancing for Spain and Greece is

Table 5.5 Trade balance changes (in p.p.) in MMEs and their composition (% changes) 2007–2013

	France	*Greece*	*Italy*	*Portugal*	*Spain*
Total TB	***–0.96***	***6.92***	***1.80***	***6.01***	***7.97***
Exports	5.02%	54.27%	–7.97%	21.80%	22.55%
Imports	9.50%	–19.64%	–0.39%	–4.27%	–15.07%
Intra TB	***–0.71***	***3.71***	***–0.2***	***6.02***	***4.71***
Exports	–3.31%	4.55%	–14.68%	15.22%	5.22%
Imports	4.16%	–40.21%	–12.24%	–18.12%	–30.51%
Extra TB	***–0.25***	***3.21***	***2.06***	***–0.01***	***3.25***
Exports	13.29%	82.15%	10.69%	32.66%	44.83%
Imports	14.72%	–1.91%	–4.40%	22.28%	0.29%

almost completely due to a reduction of imports and only to very limited extent thanks to an increase in exports.[5] The three countries have been much less able to suppress their imports from the rest of the world but, on the other hand, their extra-regional exports have grown more significantly. Their rebalancing could hence be summarized as a combination of reduction of intra-regional imports and an increase in extra-regional exports.

Nevertheless, the optimistic observation that the rebalancing for the MMEs is partly export-led should be further qualified. Greece's export growth has been almost completely attributable to refined oil. Its refined oil exports more than quadrupled from $2.9 billion in 2008 to $14.5 billion in 2013 (+$11.6 billion while total exports in Greece only increased with $12.7 billion). The share of refined oil products in its total exports rose to 40%. The reason for this is, according to the International Energy Agency, that '[w]ith decreasing domestic demand, in principle, Greek domestic refinery production is sufficient for meeting oil demand in the country; this permits extended exports mainly to countries around the Mediterranean' (IEA 2014: 221). Also in Portugal, more than one-third of the export growth between the outbreak of the crisis and 2013 comes from fuels (+$4.3 billion and +$11.2 billion in total). This has been different for Spain, where export growth has been driven by good industrial performances in both more advanced product categories such as aircraft and tram- and railway as well as in more traditional categories such as apparel and clothing. That does not mean, however, that Spain's extraordinary export performance after 2007 is unrelated to the cyclical reduction in domestic demand: research by Belke et al. (2014) found that during economic recessions firms generally try to substitute low domestic demand by shifting sales to export markets.

Can the improved export performance and the extra-regional trade rebalancing of the MMEs be linked to their post-2007 ULC dynamics? While the reduction in wages and the ensuing decline in ULC contributed to the fall in the intra- and extra-regional imports of Greece, Portugal and Spain, it is more questionable whether their relatively favorable ULC dynamics also contributed to the surge in exports: it is noteworthy that the extra-regional exports of the MMEs grew much faster between 2007 and 2013 than their intra-regional exports. It is difficult to classify the modest increase in intra-regional exports of the MMEs (France and Italy excluded) as a successful case of ULC-led trade rebalancing, which has been hampered by weak aggregate domestic demand growth in the CMEs. Furthermore, the evolution in producer price indices (PPI) in the

EA countries suggests that the connection between ULC dynamics and intra-regional trade rebalancing is not so straightforward: Fig. 5.7 shows a *negative* correlation between changes in nominal ULC and PPI, suggesting that firms in Greece and Spain have not translated the improvement in ULC-based cost competitiveness into a reduction of producer prices. Indeed, research by the EC found that there has been an incomplete pass-through of labor cost moderation into prices, as the reduction in ULC was partially absorbed by an increase in profit margins. While noting that the incomplete pass-through of wage cuts into prices is consistent with rebalancing if and only if it predominantly occurs in the tradable sectors, the EC expressed concern that the lack of competition in the non-tradable sectors also increased the profit margins in these sectors and hence inhibited a shift of resources away from the non-tradable sectors to the tradable sectors (European Commission 2013c).

These observations highlight that adjustment strategies unidimensionally targeting a reduction in ULC to restore the external competitiveness of the tradable sectors are overly simplistic. For one thing, these strategies neglect the fact that production costs in the tradable sectors are to an important extent determined by price developments in the non-tradable sectors. Mitsopoulos and Pelagidis (2014), for instance, argue that 'clientelistic domestic politicians' in Greece 'fully exploited the opportunity to push all the costs and risks of the adjustment program onto the productive [tradable] sector[s] of the economy—particularly on wages—while shielding their clients in the administration and the overregulated oligopolistic/monopolistic [non-tradable] sectors of the economy'. In order to translate labor cost improvement into

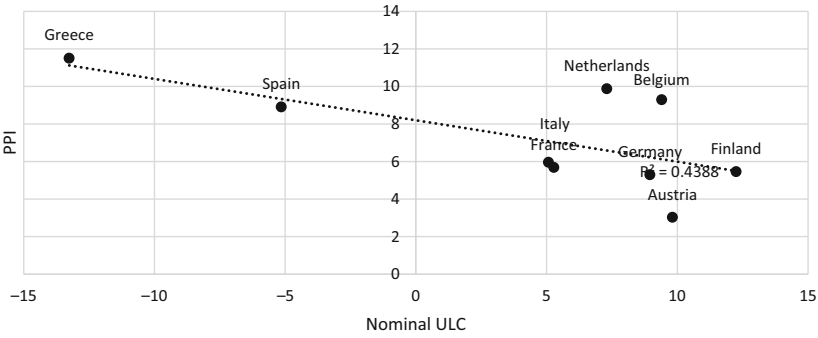

Fig. 5.7 Change in PPI and nominal ULC between 2010 and 2014 (in %)

export competitiveness, Greece and the other southern MMEs particularly needed to intensify their efforts at productivity improvements and growth-enhancing product market reforms (Ioannides 2015). Moreover, the cost competitiveness of the tradable sector firms in the southern MMEs has been hampered by the sharp increase in financing costs, which impeded their investments. Therefore, as the EC (2013b: 23) acknowledged, rebalancing of the southern MMEs also required an improvement of funding conditions 'in order to allow tradable sector firms to offset the decline in domestic markets by finding external ones, and, in a broader sense, to reallocate resources in the tradable sector'. The need to ease financing conditions in the tradable sectors stressed the importance of an accommodative monetary policy by the ECB, whose OMT decision in September 2012 proved critical in stabilizing sovereign bond markets and reducing long-term interest rates in the southern MMEs.

The need for an accommodative monetary policy to encourage trade rebalancing of the MMEs also pointed to the critical importance of another variable: the nominal exchange rate of the euro. The depreciation of the euro, whose nominal effective exchange rate (NEER) fell by 16.7% between October 2009 and August 2012, was much more effective in improving the price competitiveness of southern EA producers vis-à-vis non-EA producers than the reduction in ULC—especially in light of the low pass-through of ULC onto producer prices. Together with weak domestic demand in the EA, this helps to explain why the extra-regional exports of the MMEs increased much faster from 2007 to 2013 than their intra-regional exports (Table 5.5). The importance of nominal exchange rate fluctuations in affecting the price competitiveness of the MMEs' tradable sectors also revealed the vulnerability of adjustment strategies based on internal devaluation: when the NEER of the euro appreciated by more than 10% from September 2012 to May 2014 as a result of the insurance devise offered by the ECB's OMT pledge, the effect of the reduction in ULC on their *potential* cost competiveness vis-à-vis non-EA producers was nullified (Uxo et al. 2014). The president of the ECB regularly expressed his concern about the nominal appreciation of the euro during this period, which 'affect[ed] external demand and reduce[d] the competitiveness gains of price and cost adjustment in some [EA] countries' (Draghi 2014). Since the appreciation contributed to deflationary pressures in the region, the ECB was forced by June 2014 to adopt an arsenal of unconventional measures that eventually culminated into the initialization of an extensive QE program in January 2015. These measures, which contributed

to a depreciation of the euro's NEER of more than 14% between May 2014 and April 2015, can be expected to be more effective in rebalancing the MMEs' extra-regional trade than their internal devaluation strategies based on wage cutting.

Notes

1. As UNCTAD explains '[t]rade correlation index is a simple correlation coefficient between economy A and economy B's trade specialization index. The resulting coefficient can take a value from –1 to 1. A positive value indicates that the economies are competitors in global market since both countries are net exporters of the same set of products. Consequently, a negative value suggests that the economies do not specialize in the production/consumption of the same goods, and are therefore natural trading partners. To reduce distortion due to low value trade or insignificant product share (it can produce high index even through economically insignificant), only products that are part of cumulative trade share up to 95% are included in the calculation of the correlation.
2. The appreciation of the euro most likely reduced investment spending by French exporting firms, according to a study by the OECD: 'in the context of an appreciation of the exchange rate … French exporters have had to trim their margins significantly in order to offset the upward pressure from their relative unit labor costs and simultaneously maintain their price competitiveness. This may have dampened investment spending in general, and on R&D in particular, in the export sector, thus leading to tighter supply-side constraints and an insufficient non-price competitiveness' (Kierzenkowski 2009: 12–13). Interestingly, the same study also argued that the relatively strong productivity gains achieved by the French industry 'were more defensive (obtained by closing the least profitable activities and laying off the least productive employees) than offensive, i.e. generated by a wave of technological innovation' (2009: 18–19).
3. AMECO database.
4. The export/import changes in the table show with which percentage these have adjusted over the period 2007–2013, not the share they assume in the adjustment. For example, in Greece imports were three times as high as exports in 2007. While, since the crisis, the percentage change for exports was higher than for imports (as indicated in Table 5.5), the nominal adjustment of imports exceeded that of exports, hence assuming a larger share of the rebalancing.
5. Again, the percentage changes shown in the table underestimate the share of import-reduction in intra-regional adjustment.

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CHAPTER 6

Conclusions

Abstract Our analysis of the contribution of extra-regional trade deficits to the euro crisis and the role of the rise of emerging powers—BICs in particular—therein leads to grim conclusions. We concur with existing macroeconomic and political economy accounts of the crisis that the problems of the southern euro area member states are beyond cyclical but are structurally rooted in the diverging impact of the supranational monetary policy and domestic institutional capabilities to cope with these. However, we have shown that the southern member states' problems run even deeper. Beyond problems to contain their cost competitiveness, they have a problem of non-price competitiveness as they produce an unfavorable basket of products that are of relatively low quality and in relatively low demand but faced with high competition. The rise of the emerging powers has reinforced all of these unfavorable dynamics. Our policy relevant conclusions are that the export-led growth strategy based on cost-cutting in the southern member states through internal devaluation is destined to fail. It will not solve the problem that these countries are 'stuck in the middle': too costly to compete on price with emerging markets and developing countries but insufficiently sophisticated to compete on quality with developed economies. An exit from the euro area would solve this problem neither. What the southern euro area countries need are not only structural microeconomic reforms but also structural transformation of the composition of their economy. We argue that a modern industrial policy targeted at developing (niche and elevator) sectors for the future

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rather than protect industries from the past and funded and supervised by supranational institutions represents the only viable and desirable 'high road' recovery and future growth path for the southern euro area member states, benefitting the region as a whole.

This book has offered an encompassing analysis of the uneven crisis that has affected the north and south of the EA after the outbreak of the global financial crisis very differently. We have shown how the EA periphery has been hit by a 'perfect storm' that had been building up very soon after the introduction of the euro. This is importantly, but far from exclusively, related to the asymmetrical effects of the workings of the dysfunctional monetary union, which is the favorite explanation of the bulk of the existing literature on the euro crisis. We do not dispute that the introduction of the euro endogenously led to the accumulation of competitiveness and current account imbalances as well as indebtedness, negatively impacting on the southern EA member states as they had few instruments left available to respond to these challenges. The establishment of the EMU deprived them of the ability to manipulate the interest and exchange rates and of the opportunity to revive the economy through fiscal and monetary stimulus. European and international rules on trade, competition and capital liberalization precluded their ability to protect or promote certain industries through state aid tools or to decide whereto the inflows of capital should be directed. Their relative economic and educational backwardness and the underdevelopment of their capital markets made it difficult to ensure that the cheap and abundant capital that was flowing in was put to its most productive use. But, as we have argued in this book, trends outside of the EA have been equally unfavorable for the southern EA. The most significant change in the global monetary system coincided with the most important modern revolution in the global economy in general: the rapid ascent of China—crowned by its accession to the WTO in 2001—followed in its wake by other emerging economies, most notably India and Brazil. All in all, this implied that southern EA countries experienced intensifying competition from emerging markets at the moment when they had become disarmed and saturated by the dynamics of EMU. In these conclusions, we reflect on what our story implies both for the existing literature on the euro crisis as well as, importantly, for the policy responses aimed at recovery in the southern EA economies and at putting the currency union as a whole on a more sustainable footing.

Beyond the Cost Competitiveness Obsession

In this book, we have complemented existing macroeconomic and comparative capitalism analyses of the euro crisis in four important ways. *First*, we have argued that the crisis should not be seen as exclusively a story of internal (meaning intra-EA) imbalances generated by the endogenous (dys) functioning of the monetary union. We have shown that external imbalances (extra-regional trade deficits with the rest of the world) have been equally important for the southern EA countries' accumulation of current account deficits. *Second*, we contended that the competitiveness problems of southern EA countries should not be reduced to a weakening in price competitiveness, resulting from the fact that diverging wage and inflation dynamics between them and the northern EA countries allegedly priced their products out of the market. Their precarious position in the run-up to the euro crisis was at least as much related to their unfavorable export structure (the type of products they manufacture and the markets in which they sell these) and the quality of their products. *Third*, that is why we argued that the euro crisis cannot be understood independently from the rise of the BICs in the global monetary and trading system, which produced an asymmetric shock to the EA: while the southern EA countries were more badly affected because of the relatively similar trade structures between them and the BICs, the northern countries have been able to profit more from the BICs' industrialization process and rise of a consumerist elite by selling high-quality capital and durable consumer goods. *Finally*, we asserted that the different vulnerabilities of the southern EA member states vis-à-vis the interaction of the rise of the BICs with the asymmetrical setup of EMU can be explained to significant extent by their domestic variety of capitalism characteristics, which go beyond their wage-setting institutions to include also skill-formation and innovation regimes.

What are the theoretical and policy implications of our analysis? The existing VoC literature on the euro crisis is very pessimistic when it comes to the future of the single currency. *Pace* macroeconomic accounts of the euro crisis and prescription for its resolution, VoC analyses argue that the problems of southern EA member states are more structural than simply an accumulation of excessive wage growth due to rigid labor markets. They consequently dispute, correctly in our view, that the current crisis response of labor market flexibilization can be a sustainable solution as this will only result in the further hybridization of their variety of capitalism: this would be the most sub-optimal option that risks counterproductively even prolonging the crisis, as it would further undermine the strategic coordination capacities

between the social partners. Regan (2013: 13) has argued that the only logical conclusion of the varieties of capitalism analysis of the euro crisis can be that 'it is hard to justify … keeping a currency that requires an adjustment that exacerbates rather than solves its debt crisis'.

Does our complementary conclusion to the traditional VoC argument—that is, that southern EA member states suffer not only from a structural-institutional weakness to control their price competitiveness leading to intra-regional trade deficits but also from their inability to manufacture sophisticated products of high quality that find dynamic demand and escape destructive competition in the current global economy, which reinforces intra- and extra-regional trade deficits—provide the final deathblow to the EA and the ability of southern countries to flourish within it? What we would certainly argue is that our analysis shows that the current route taken—an export-led recovery and growth strategy based on cost-cutting through internal devaluation—is unlikely to succeed in the context of continuing competition from emerging markets and developing countries (EMDCs): apart from the fact that such a strategy is constrained by their low export base (especially in the cases of Portugal and Greece; on Portugal, see Mamede et al. 2014; on Greece, see Brenke 2012), exports of the southern EA member states will never be able to compete merely on labor costs with exports of EMDCs. We also doubt that, given their current anomalistic trade structures, an exit from the euro and a subsequent currency devaluation would put them on a sustainable growth path: it would not structurally solve their 'stuck in the middle' problem of being too costly to compete on prices with EMDCs and insufficiently high skilled and innovative to compete on quality with CMEs and LMEs. Moreover, a strategy primarily based on internal devaluation inside the EA or currency devaluation outside of it would give the (undesired) signal to both firms and workers to further pursue competitiveness based on cutting costs rather than on upgrading added value and skills.

Nonetheless, we have shown that rebalancing of trade accounts within the EA has until now primarily occurred by following the 'low road' to recovery and competitiveness: the internal devaluation in the southern countries pushed back their imports and—together with the depreciation of the euro—boosted their extra-regional exports through an improvement of their price competitiveness. However, exports should become a resilient feature of these countries and stabilize above the historically weak levels of exporting capacities of their economies in order to render trade rebalancing sustainable. If their recent re-equilibrated trade balance position is overly based on exceptionally weak imports, economic recovery might automatically result in a return of trade deficits and be self-defeating. The same

reasoning applies to the recent increase in exports largely ascribable to the improvement of the price competitiveness of the southern EA member states because of wage reductions and the depreciation of the euro as a consequence of the ECB's late expansionary policies. An export-led recovery that is predominantly based on such regained price competitiveness is overly vulnerable to a recovery of wages, re-appreciation of the nominal exchange rate of the euro or any other shock resulting in upward prices (most notably, a rise in energy prices). Another weakness of such a recovery strategy is a downturn in global demand. At the time of writing (September 2015), there is an increasing risk that mounting economic troubles in EMEs will stifle export-led growth of the EA: 'Emerging markets buy over a quarter of eurozone exports, and these are set to come under pressure, while the competitiveness of emerging market manufactured goods will increase as the value of their currencies falls' (Tilford 2015). The devaluation in China's currency in August 2015 illustrated how economic instability in EMEs could rapidly translate into re-improved price competitiveness and hamper the EA's export-led growth.

Moreover, by stimulating export-led recovery through internal devaluation, the 'stuck in the middle' problem of southern EA member states risks only to be aggravated. As we have seen, their poor trade balance performance cannot exclusively be related to excessive wage growth and consecutive loss of price competitiveness, but should also be interpreted as a consequence of the fact that they produce goods for which competition from emerging markets is tough and/or global demand is below average. By pursuing the low road of export-led recovery based on price competition, their anomalistic specialization pattern risks becoming even more entrenched. Southern EA countries need a 'virtuous cycle' of improvement of skills, investments in higher value-added production capacity and higher growth generating resources for further investment in education and research, development and innovation. Apart from a recovery of price competitiveness in these countries, a more sustainable rebalancing strategy requires reflationary policies in the northern countries as well as an industrial policy that is able to put the southern countries on the 'high road' of competing on higher value-added and quality-differentiated production. We now turn to both of these issues.

More Symmetrical Adjustment and EMU Regime: Necessary but Insufficient

Based on our analysis, we can state that a more balanced recovery, centered on more expansionary policies in the north, is a necessary, but insufficient solution for recovery in the south in the short term. As Ederer and Reschenhofer (2014: 25) have also recommended: 'neither an increase

in domestic demand in the North nor the decrease of it in the … South [alone] can reduce the imbalances entirely … A combination of these two strategies, in the style of a balanced growth scenario, would adjust trade surpluses and deficits to a certain extent. Some of the deficits however seem to have long-time roots and need to be corrected by policies which aim at improving the countries' positions within global value chains.' We return to a call for an industrial policy for the south below.

Our analysis reveals that the EA's crisis response is plagued by several contradictions associated with the lack of more symmetrical adjustment: because the reduction in trade deficits in the MMEs occurred in the absence of substantial adjustment of trade surpluses in the CMEs, the EA's trade balance moved to a significant surplus that reduced the effectiveness of the MMEs' 'internal devaluation strategies' by putting upward pressure on the exchange rate of the euro. The ECB's recent QE program attenuated this effect by contributing to the depreciation of the euro, which helps the recovery of the southern MMEs in the short term by making their price-sensitive products cheaper vis-à-vis extra-regional competitors. Nevertheless, the combination of an increasing aggregate trade surplus of the EA with a depreciating euro risks infuriating countries in the rest of the world and leading to retaliatory responses. It is noteworthy that already in its 2012 report on worldwide exchange rate manipulation the US government had shifted its attention from China to the surplus countries in the EA—most notably Germany. As the report argued: 'Germany's anemic pace of domestic demand growth and dependence on exports have hampered rebalancing at a time when many other [EA] countries have been under severe pressure to curb demand and compress imports in order to promote adjustment. The net result has been a deflationary bias for the [EA], as well as for the world economy' (U.S. Department of the Treasury 2013: 25). Taking into account the increase in the EA's trade surplus and the euro's depreciation since the publication of the report, it remains to be seen whether and how long third countries—especially export-dependent EMDCs—will abstain from adopting retaliatory policies. Indeed, the EA crisis hit firms in many EMDCs with a 'double whammy' of diminishing demand for their exports and declining exchange rate competitiveness.

The persistently weak domestic demand in the CMEs and their ensuing export dependency might also preclude industrial (see below) and trade policies that could be beneficial for the southern MMEs. Since extra-regional trade has become more central to the growth strategies of the northern countries, their liberal trade policy preferences can be expected to harden further. As we discussed in Chap. 3, it was already the case

before the crisis that the interests of southern EU member states in, for example, anti-dumping measures vis-à-vis China and other emerging economies were (much) less than fully translated into effective EU decisions on anti-dumping measures due to the combination of the decision threshold with anti-anti-dumping preferences of northern EU member states. The latter member states were less hurt by the dumping of cheap consumer goods (such as textiles and clothing or footwear) and even profited in terms of increased purchasing power through cheaper imports of these products. Moreover, it should be noted that some of their firms have in previous decades outsourced (low-skilled parts of) the production of these goods exactly to China and other emerging economies. The crisis has not changed this liberal bias in EU trade policy and has arguably even reinforced it, as all EA member states have become more dependent on emerging economies as a source of external demand—a dynamic that is predicted to only intensify in the coming decade if the EA countries stick to their current growth strategies. Today, this is reflected in policy debates on the question if China should be granted market economy status by the EU at the end of 2016, as foreseen in its WTO accession protocol. That would make it more difficult for the Union to impose anti-dumping measures against Chinese imports in the future. While (especially southern) member states that compete with Chinese imports on the EU market and export little to China oppose its recognition as a market economy because they fear even more competition as a consequence, it is welcomed by (especially northern) member states that already export significantly to China.

In short, a more symmetrical distribution of the burden of adjustment in the EA—whereby the northern member states agree to adopt reflationary policies to reduce their trade surpluses—would assist the southern member states through different channels. Through a direct channel, it would boost their exports to the rest of the EA (remember that extra-regional exports of the MMEs increased much faster than their intra-regional exports). Stockhammer and Sotiropoulos (2014) estimated that external adjustment based on unilateral internal devaluation would require a 23% reduction in GDP to balance current accounts in the peripheral countries, leading them to argue for inflationary adjustment in the northern countries—involving higher wages and expansionary policies—to allow for a less deflationary rebalancing in the southern countries. Through an indirect channel, the adoption of internal revaluation in the northern countries would contribute to the trade rebalancing of the southern countries by reducing the EA's aggregate trade surplus and weakening the euro, which would make the products of the latter countries more competitive

vis-à-vis those of non-EA producers. While it is frequently argued that the extra demand generated by an internal revaluation in the northern countries would to certain extent be seized by countries from the rest of the world and not necessarily lead to a proportional increase in exports of the southern countries, these arguments neglect the potentially significant nominal exchange rate channel through which a reduced aggregate trade surplus of the EA would support the capacity of the latter countries to export to the rest of the world.

It is interesting to note that EC became increasingly critical about the persistently high surpluses of several CMEs exactly for these reasons. In a 2013 report on the imbalances the Commission acknowledged for the first time that excessive surpluses can have negative implications for debtor countries through the common exchange rate: 'Unless the real effective exchange rate appreciates in the surplus countries due to relatively stronger increases in wage and price levels, the nominal exchange rate of the euro will tend to appreciate' which 'may have competitiveness and deflationary effects on … countries whose exports are more price-sensitive' (European Commission 2013: 15). The Commission maintained that 'an increase in demand in the [EA] surplus economies would improve the trade balance of the [EA] peripheral economies', particularly 'if such an increase in demand (and reduction in the trade balance) of the surplus countries took place in parallel with a weakening of the euro exchange rate' (2013: 16).

Despite the Commission's analysis of these spillovers and its instructions to stimulate demand in surplus countries, VoC scholars argue that CMEs will remain highly reluctant to adopt internal revaluation policies, which are believed to be inconsistent with the domestic institutional logic of their export-oriented growth model. Höpner and Lutter (2014: 20), for instance, maintain that wage-led reflation in Germany would clash with the 'interest-based logic of the German tendency to undervalue, brought about by coordinated wage bargaining': 'Nominal wage inflation would not only raise prices vis-à-vis other EA members, but also vis-à-vis Eastern Europe, the United States, and Asia. Even if trade unions could commit themselves to such a strategy, wage restraint would presumably be [reinstalled] by company-based social pacts.' The sensitivity of CME manufacturers to changes in their extra-regional price competitiveness would be reinforced by the increased trade competition with EMEs in technology-intensive sectors, as stipulated in Chap. 4. Indeed, as Di Mauro and Foster (2008: 20) observed, 'although China and other emerging countries continue to specialize in low- and medium-low-

technology industries, these countries have also shown growing revealed comparative advantages in easy-to-imitate research intensive production coupled with a decline in raw materials intensive sectors. These developments are also apparent in specialization by technology content, showing an increasing Chinese specialization in high technology industries in recent years and a corresponding lower specialization in low-tech industries.' Taking the importance of these competitiveness issues into consideration, VoC scholars generally argue that CMEs such as Germany would prefer abandoning the euro to intentionally inflating their economies and are therefore highly skeptical about the prospects of the euro (Iversen and Soskice 2013; Hancké 2013; Höpner and Lutter 2014; Regan 2015).

What are the implications of our analysis for the political-economic sustainability of European monetary integration in the context of continuing capitalist variety? First, we believe that the appreciation bias in the ECB's monetary policy framework can easily be mitigated in ways that are complementary to the domestic institutional logic of both CMEs and MMEs. A more accommodating monetary policy framework, which would give the ECB a dual mandate to promote price stability and maximum sustainable employment, could have moderated the rise in the MMEs extra-regional trade deficits by mitigating and perhaps even preventing a structural overvaluation of the euro: as we discussed in Chap. 5, it is remarkable how fast the extra-regional exports of the MMEs have increased against the background of the euro's depreciation since the eruption of the crisis. VoC scholars tend to be highly skeptical about the willingness of the CMEs—Germany in particular—to allow the implementation of less restrictive monetary policy framework, since large unions 'would no longer be bound by their commitment to coordinated wage restraint' in the presence of an accommodating central bank (Iversen and Soskice 2013; see also Hancké 2013). Although German unions in the metal and chemical industries were able to secure wage increases of respectively 3.4% and 2.8% after the start of the ECB's QE program, there is no reason to believe that these unions do not remain committed to preserving the long-term competitiveness of their export-oriented employers. Germany's trendsetting trade union in the metal industries, for instance, did not consider an adjustment of its wage target in response to the ECB's unconventional expansionary policies.[1] Interestingly, the euro's lower exchange rate ensuing from these policies was even praised by Angela Merkel for helping the southern EA countries to carry out structural reforms: in June 2015 the German chancellor expressed her concern that the euro's temporary appreciation in

May 2015 would 'make it more difficult [for these countries] to reap the benefits of reforms' (Merkel quoted in Blitz and Jones 2015).

Apart from a more accommodating monetary policy framework for the ECB, a more symmetrical management of macroeconomic imbalances than the one embodied in the MIP also seems necessary to make the euro more institutionally compatible with the needs of MMEs. As we noted in Chap. 4, the MIP contains an asymmetry in the quantitative assessment of thresholds—with current account surpluses above 6% of GDP and deficits above 4% considered excessive—that is difficult to defend both from a political and economic perspective. In minimum, its instructions to pursue devaluation in ULC in deficit countries should coincide with equally stringent instructions to pursue a revaluation of ULC that is at least consistent with the ECB's 2% inflation target. In this regard, the prevalent view in the VoC literature that trade unions in CMEs have become too conservative to adopt such an institutionally imposed wage target needs to be qualified. It is important to emphasize that Germany's ULC dynamics during the pre-crisis years persistently *undershot* these targets, which should be attributed to the flexibilization of labor markets in the service markets rather than to trade unions' conservative wage demands during collective bargaining in the industrial sectors. Notably, Germany's stellar labor market performance throughout the crisis induced trade unions to become more assertive in their wage demands, leading key trade unions such as IG Metall to increasingly link their wage target ambitions to developments in the rest of the EA.[2] During the summer of 2014 German trade unions received some unexpected assistance from the Bundesbank's president, who backed the push for inflation-busting wage settlements by arguing in favor of wage increases of at least 3% as a way to reduce deflationary pressures in the EA. Bundesbank economists also allegedly asked the Confederation of German Trade Unions (DGB) to encourage their members to base their wage targets on the ECB's 2% inflation target instead of the actual, much lower level of inflation.[3]

As such, we should not underestimate the potential domestic societal support for an institutional wage target that corresponds with a 2% ULC revaluation in Germany as long as its current account surplus is above 4% and aggregate inflation in the EA is significantly below the ECB's target. As we showed in Chap. 4, a comparison of the trade experiences of the CMEs during the pre-crisis years suggests that Germany's devaluation in ULC reduced domestic demand much more than it boosted exports, as German manufacturing firms increased profit margins rather than reducing output prices. It is, therefore, difficult to believe that a 2% ULC target would be

fundamentally at odds with the domestic institutional and export-oriented interest-based logic of the German model of capitalism; with Germany acting as a de facto wage-setter for the other northern EA countries, trade unions in the latter countries can similarly be expected to endorse such a target. At the same time, neither should we be believe that the southern EA countries will unavoidably return to inflationary wage settlements as soon as their economies start to recover. As Sapir and Wolff (2015: 5) have argued, *all* EA countries could, in principle, 'put in place a mechanism to ensure that, although operating within their own system, the behavior of social partners and the outcome of their wage negotiations is compatible with membership of the EA in terms of competitiveness and employment'. In this respect, as scholars of comparative capitalism have rightly noted, the capacity of CMEs to adopt wage restraint indicates that far-reaching labor market flexibilization as demanded by EU institutions is not necessarily the correct institutional approach to guarantee the longer-term price competitiveness of the southern countries.

From Structural Reforms to Structural Transformation: The Role of Industrial Policy

While *necessary* to significantly mitigate the problem of diverging competitiveness, we do not believe that a more symmetrical EMU regime would be *sufficient* to support the industrial structures of the southern countries in the face of a continuing rise of EMDCs in the world economy. Our analysis also points at the need for an industrial policy—commonly defined as government policies aimed at affecting the economic structure of a country—for the southern EA member states. As many observers have argued (e.g., Stiglitz et al. 2013; Pianta 2015; Rodrik 2008), the idea of industrial policy, which had been discarded since the neoliberal revolution led to the dominant believe in the efficiency superiority of the market, has been pulled out of the bottom drawer by politicians from across the ideological spectrum in the USA, UK and Japan among others. In the past decades, especially sector-specific industrial policies where government action is aimed at directly guiding resources to certain industries had become anathema based on the one-sided view that industrial policy is prone to government failures due to incomplete information and the risk of capture by rent-seeking actors (see Mazzucato 2013 for a rebuttal). A horizontal approach, on the other hand, aimed at setting the right framework conditions for successful businesses without government discretion about which sectors should be targeted remained more acceptable (Stiglitz et al. 2013).

Indeed, the horizontal variant has clearly been preferred over the sectoral one in EU industrial policies over the past decades, as conceived in the famous 2000 Lisbon Strategy and its successor Europe 2020 (see also Pianta 2015). While the EC's 2014 Communication 'For a European Industrial Renaissance' recognized the importance of the industrial sector and called for a prioritization of stimulating and modernizing this sector throughout Europe (with the high-profile objective of bringing the share of manufacturing back to 20% of GDP from around 15% in the wake of the crisis)—making the pertinent observation that '[w]ith scarce natural and energy resources and ambitious social and environmental goals, EU companies cannot compete on low price and low quality products' (European Commission 2014b: 8)—the initiatives outlined in the document remained focused on further liberalizing the single market in order to stimulate innovation and skill formation in firms and supporting their entrepreneurship and internationalization. However, as we elaborate below, recent insights into the conditions for successful industrial policies have shown that such horizontal policies might be insufficient if the industrial base and educated workforce is lacking to absorb efficiently incentives for research and development.

Therefore, the existing horizontal approach should be complemented for the southern member states of the EA with a sectoral approach targeting specific high-end sectors in which they can position themselves competitively, which would allow them to make use of the facilitating horizontal policies and generate a virtuous circle of growth, high-skill employment creation, attraction of investment and further innovation. As Cimoli et al. note (2015: 128), without these sectoral industrial policies, 'financial markets are inadequate instruments for translating a future and uncertain potential for learning into current investment decisions'. Hausmann and Rodrik (2006; with Hwang 2007) have shown that the sophistication of an export package is predictive of consecutive medium term growth. Therefore, it is hard to imagine a sustainable growth regime for the southern EA member states without expanding and upscaling their export base. Rather than a spontaneous, market-driven process that will unfold itself once a government has horizontally established rules to a fair game and ensures their enforcement (a 'stairway to heaven'), climbing up the value chain necessitates more strategic government intervention: 'development will be path dependent on the opportunities opened by the assets and institutions bequeathed by previously existing activities' (Hausmann and Rodrik 2006: 9). For the southern EA member states, this implies that they will not be able to breakaway into a dynamic export

path based on lowering ULC only, but need to develop certain high-quality activities that facilitate the development of other, related sophisticated activities: 'the dependence of activities on pre-existing capabilities means that a purely market-based structural transformation will be too slow' (Ibid.: 21). Because of coordination problems, a combination of structural reforms and horizontal policies to stimulate skill formation and innovation might fail if there are insufficient activities to absorb skilled workers and innovation incentives.

We therefore believe that the only desirable and successful strategy can be to upgrade the economic structure of southern Europe toward higher value-added production through industrial policies, combining sectoral ones that promote the development of high-quality and preferably 'elevator' sectors with horizontal ones that improve the skill-formation and innovation capacities of these member states. While this will inevitably be a long and slow process, it is in our view the only way to put the southern EA member states onto the 'high road' toward recovery and sustainable growth, which would additionally unleash positive feedback effects in the labor and industrial relations structure. As the MMEs have painfully demonstrated during the previous two decades, the deindustrialization or lack of upgrading of a country's economy can spillover into low demand for and consequently supply of skilled labor (by limiting career prospects and graduates being forced in or attracted to jobs that do not require their higher qualifications). Indeed, during the pre-crisis period of rapid labor demand increases in low-skilled, sheltered sectors, the opportunity cost of pursuing higher education increased. In Spain, this has been especially the case during the housing boom, which generated fast growing demand for low-skilled construction workers. We argue that a targeted industrial policy can transform such self-reinforcing vicious dynamics and lead to a virtuous cycle. To be clear, such an industrial policy should be forward-looking, aimed 'to push the economy toward an evolving new pattern of specialization rather than allowing the economy to become entrenched in an existing system' (Landesmann 2015: 135; for a discussion about the difference between industrial policy directed toward comparative advantage-developing and comparative advantage-following policies, see Warwick 2013). The 'green' industry would be an obvious candidate, given southern EA climatic comparative advantages in their application, the relatively 'new' character of this industry and the potential contribution it would bring to the EU's 2020 agenda and, especially, its ambitious climate and energy goals (on 'green industrial policy', see Rodrik 2014).

Such a 'high road' to recovery and competitiveness for the southern Eurozone member states is currently lacking in the 'troika programs' imposed on these countries as well as in what is presented as EU industrial policy. Aiginger et al. (2012; see also Aiginger 2014) identified four blind spots in the adjustment programs: the lack of industrial policy to boost investment in production; the lack of innovation policies; the lack of strategies to boost exports to dynamic global markets; and the lack of measures to boost alternative energy. They recommend that 'since higher investment is at the core of a successful strategy to regain growth, industrial and investment policies are specifically needed to complement the current passive strategy of cutting public deficits and labor costs' (Aiginger et al. 2012: 6).

Since the crisis the EU has incurred an 'investment gap', with investment falling significantly below both its own historical trend (–14% in the 2009–2013 period in comparison with the 2003–2008 period) as well as below post-crisis investment in the USA (+4% in the same period) and, especially, China and a number of other emerging economies (+92% in China, Taiwan, Hong Kong and South Korea). This risks weakening the non-price competitiveness of the European economy. The lack of post-crisis and hence urgent need for investment has been recognized in the EU in the past years, resulting in the proposal for the European Fund for Strategic Investments (EFSI, or 'Juncker Plan'), which should unlock additional private investment of at least €315bn over the next three years in strategic projects across Europe through €21bn of public guarantees. While the recognition of the need for investment and the identification of a number of 'strategic sectors' could be applauded, the investment plan is clear in not earmarking money for investment in certain (southern) member states where the investment gap after the crisis is the largest (while investment in the 2009–2013 period increased moderately in Austria, Germany and the Netherlands, it decreased significantly in *all* the MMEs). Next to an investment gap, the southern member states also suffer from an innovation gap, which—except for Italy—has only increased since the crisis (European Commission 2014c). Taking into account that these investments will have to be made by *private* investors (backed by limited public guarantees), it remains to be seen whether the obstacles of uncertainty and demand deficiency associated with the euro crisis can be overcome. This is a clear situation where coordination failures lead to a socially sub-optimal outcome and the government should step in. Since the southern EA member states clearly lack the capacities to finance such an investment boost themselves, a real European industrial policy should be pursued.

While such an industrial policy for southern Europe should be multi-dimensional and multi-level, we believe that the supranational level should play an important role in this. The reason for this is not only fiscal; it is also related to the need to minimize the risk of government failures in executing industrial policies. First, as recently argued by the IMF staff (Ostry et al. 2015), the CMEs—except Belgium—have significant fiscal space to invest, while none of the MMEs can afford that luxury currently. Given that the investment gap is much larger in southern Europe, the fiscal space available could arguably be put to its most productive use there. As it is difficult to imagine that money would be directly borrowed by northern member states and invested in the south, the intermediation of public investment funds could be achieved more realistically through an expansion of existing supranational resources (such as the Structural Funds) and joint risk sharing, along the lines of the already existing Europe 2020 project bond initiative. Also possible would be for the ECB to back European Investment Bank (EIB) bonds, as proposed by Varoufakis, Holland and Galbraith in their 'Modest Proposal' (2013) and later supported by Wolff (2014). This kind of investment-oriented solidarity between the EA member states would, of course, have to be accompanied by a certain degree of control. Projects could be selected by existing institutions such as the EIB and overseen by the Directorate-General Competition, which would limit the risk that the investment would be undesirably allocated to protect uncompetitive existing firms or increase the rents of incumbents.

On the other hand, industrial policy should be as much as possible embedded in domestic structures in the sense that the projects would have to be selected in close interaction with local actors involved (Hausmann and Rodrik 2006; Landesmann 2015). This could form the basis for strategic, forward-looking coordination in the south between employers, trade unions and the state that has been lacking in the past. As te Velde (2010: 3) argues, a successful industrial policy hinges on a collaborative state-business relationship: 'When the state and business interact effectively, they can promote more efficient allocation of scarce resources, conduct a more appropriate industrial policy, remove the biggest obstacles to growth and create wealth more efficiently.' The presence of authoritative peak-level employer organizations with members that are willing to share private information in R&D collaboration might be seen a precondition to the establishment of such a collaborative state-business relationship. In this regard, a key challenge for the implementation of a horizontal industrial policy in the southern MMEs would be to overcome the relatively high degree of fragmentation in their systems of industrial representation. As

a result of this fragmentation, 'Social partners have invested in political power through strong alliances with political parties and clientelistic relations. As a consequence, industrial relations have traditionally been an arena for dealing with conflicts rather than providing protection, produce collective goods or achieve a better fit between production and protection systems' (Molina and Rhodes 2008: 16). As the fragmentation of industrial actors has led adjustment processes in these countries to depend largely on the willingness of the state to intervene, the state needs to provide 'a sound macroeconomic environment, an industrial setting in which firms can develop a rich and dense network of relationships, and access to a full range of resources outside their walls' (Calvo 2015: 345) in order for manufacturing firms to thrive and generate a steady stream of innovation.

It is clear, however, that the current recovery strategy and adjustment programs demanded and imposed by the EU institutions have constrained the capacity of the state in the southern MMEs to offer such an appropriate macroeconomic environment, industrial setting and range of resources. The EU institutions have organized a 'frontal assault' on multi-employer bargaining arrangements in these countries, thereby undermining the development of new forms of autonomous coordination between industrial actors and disregarding the substantial evidence on the macroeconomic benefits which flow from these arrangements (Marginson 2014: 15). Indeed, as we aimed to show in this book, the paradox of the EU's export-oriented growth strategy based on an internal devaluation in the southern member states is that it weakens the very macroeconomic conditions and domestic institutions necessary for the much needed industrial upgrading of their economies.

Notes

1. Interview with representative of IG Metall, December 2014 in Frankfurt.
2. Interview with representative of IG Metall, December 2014 in Frankfurt.
3. Interview with representative of Gesamtmetall, January 2015 in Berlin.

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Annex 1 CMEs: Trade Indicators for Five Most Important Export Sectors and Vehicles (87), Machinery (84) and Electronic Products (85)

Germany

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
32	Tanning/dyeing extract; tannins & derivs; pigm et	1,18	0,93	1,86	2,1	5.53	0,66	0,39	0,78	0,59	1,91	1,75
87	Vehicles o/t railw/tramw roll-stock, pts & access	17,04	16,58	1,69	2,24	7.10	0,73	0,79	0,14	0,36	0,19	0,55
38	Miscellaneous chemical products.	1,56	1,68	1,55	1,65	7.87	0,66	0,41	0,5	0,55	1,00	1,05
30	Pharmaceutical products.	2,51	5,03	1,48	1,9	12.80	0,28	0,24	0,19	0,11	1,38	1,31
39	Plastics and articles thereof.	4,42	4,08	1,41	1,26	6.70	0,46	0,45	0,84	0,87	0,58	0,37
84	Nuclear reactors, boilers, mchy & mech appliance;	19,02	16,71	1,24	1,48	6.33	0,54	0,47	0,64	1,53	0,18	0,35
85	Electrical mchy equip parts thereof; sound record	11,27	9,7	0,79	0,77	6.17	0,26	0,16	0,14	0,36	0,63	0,72

Austria

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
86	Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds.	1,06	1,25	4,86	5,64	8.92	0,25	0,34	3,78	2,24	0,02	0,06
83	Miscellaneous articles of base metal.	1,08	1,36	2,78	3,95	9.46	0,32	1,13	1,67	1,95	0,83	0,43
73	Articles of iron or steel	3,06	3,58	2,02	2,12	8.88	0,73	0,44	1,47	1,53	1,36	1,29
76	Aluminium and articles thereof.	1,94	2,34	1,8	2,77	9.12	2,46	0,61	0,4	1,07	0,63	0,72
72	Iron and steel.	3,36	4,1	1,78	1,9	9.19	3,23	1,6	0,56	0,81	1,29	1,4
84	Nuclear reactors, boilers, machinery and mecha	18,63	17,56	1,21	1,56	7.19	0,54	0,47	0,64	1,53	0,18	0,35
85	Electrical machinery and equipment and parts tl	13,65	10,45	0,95	0,83	5.61	0,26	0,16	0,14	0,36	0,63	0,72
87	Vehicles o/t railw/tramw roll-stock, pts & acces	10,55	9,38	1,05	1,27	6.75	0,73	0,79	0,14	0,36	0,19	0,55

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Belgium

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
71	Natural/cultured pearls, prec stones & metals, co	7,39	4,68	3,94	1,26	4.34	0,58	0,36	0,69	0,61	10,93	3,53
39	Plastics and articles thereof.	7,18	6,71	2,29	2,07	7.28	0,46	0,45	0,84	0,87	0,37	0,58
72	Iron and steel.	4,16	3,48	2,2	1,61	6.42	3,23	1,6	0,56	0,81	1,29	1,4
29	Organic chemicals.	5,45	7,64	2,19	3,23	10.42	0,59	0,83	0,75	0,81	1,5	1,67
30	Pharmaceutical products.	3,27	9,84	1,93	3,71	16.61	0,28	0,24	0,19	0,11	1,38	1,31
87	Vehicles o/t railw/tramw roll-stock, pts & access	14,17	9,55	1,41	1,29	4.79	0,73	0,79	0,14	0,36	0,19	0,55
84	Nuclear reactors, boilers, mchy & mech appliance;	9,31	7,04	0,61	0,62	5.66	0,54	0,47	0,64	1,53	0,18	0,35
85	Electrical mchy equip parts thereof; sound record	6,19	3,18	0,43	0,25	2.78	0,26	0,16	0,14	0,36	0,63	0,72

Netherlands

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
90	Optical, photo, cine, meas,	5,34	5,11	1,68	1,57	8.67	0,29	0,12	0,75	1,05	0,17	0,21
39	Plastics and articles thereo	4,83	4,44	1,54	1,37	8.38	0,46	0,45	0,84	0,87	0,58	0,37
38	Miscellaneous chemical pr	1,23	1,68	1,23	1,65	11.46	0,66	0,41	0,5	0,55	1,00	1,05
84	Nuclear reactors, boilers, r	18,2	12,62	1,19	1,12	6.20	0,54	0,47	0,64	1,53	0,18	0,35
30	Pharmaceutical products.	1,97	3,9	1,16	1,47	14.47	0,28	0,24	0,19	0,11	1,38	1,31
85	Electrical mchy equip parts	10,99	7,7	0,77	0,61	6.28	0,26	0,16	0,14	0,36	0,63	0,72
87	Vehicles o/t railw/tramw r	5,34	5,11	1,68	1,57	8.67	0,73	0,79	0,14	0,36	0,19	0,55

Finland

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
89	Ships, boats and floating structures.	2,56	0,85	3,43	1,08	-3.70	0,03	4,19	1,12	1,66	0,29	1,37
72	Iron and steel.	3,55	6,49	1,88	3,01	8.82	3,23	1,6	0,56	0,81	1,29	1,4
74	Copper and articles thereof.	1,03	1,89	1,76	2,19	8.82	0,45	0,5	0,54	0,37	0,39	1,05
85	Electrical mchy equip parts thereof; sound record	23,7	8,5	1,65	0,67	-3.15	0,26	0,16	0,14	0,36	0,63	0,72
73	Articles of iron or steel.	1,68	1,98	1,11	1,17	5.47	0,73	0,44	1,47	1,53	1,29	1,36
84	Nuclear reactors, boilers, mchy & mech appliance;	11,75	13,62	0,77	1,21	5.32	0,54	0,47	0,64	1,53	0,18	0,35
87	Vehicles o/t railw/tramw roll-stock, pts & access	4,12	3,2	0,41	0,43	2.35	0,73	0,79	0,14	0,36	0,19	0,55

Annex 2 MMEs: Trade Indicators for Five Most Important Export Sectors and Vehicles (87), Machinery (84) and Electronic Products (85)

France

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
33	Essential oils & resinoids; perf, cosmetic/toilet	2,38	2,94	4,18	4,82	6.33	0,43	0,47	0,26	0,27	0,81	0,79
88	Aircraft, spacecraft, and parts thereof.	5,1	9,96	2,44	9,72	9.87	1,89	1,76	0,14	0,09	0,04	1,20
30	Pharmaceutical products.	3,14	6,52	1,85	2,46	10.37	0,28	0,24	0,19	0,11	1,38	1,31
38	Miscellaneous chemical products.	1,63	2,13	1,62	2,09	6.76	0,66	0,41	0,5	0,55	1,00	1,05
72	Iron and steel.	2,57	2,78	1,36	1,29	5.35	3,23	1,6	0,56	0,81	1,29	1,4
84	Nuclear reactors, boilers, mchy & mech appliance;	14,36	11,44	0,93	1,01	3.06	0,54	0,47	0,64	1,53	0,18	0,35
87	Vehicles o/t railw/tramw roll-stock, pts & access	12,61	8,18	1,25	1,1	1.57	0,73	0,79	0,14	0,36	0,19	0,55
85	Electrical mchy equip parts thereof; sound record	11,63	7,83	0,81	0,62	1.83	0,26	0,16	0,14	0,36	0,63	0,72

Italy

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
51	Wool, fine/coarse animal hair, horsehair yarn & f	1,01	0,46	4,83	5,76	0.01	0,22	0,23	2,37	1,49	0,59	0,61
69	Ceramic products.	1,77	1,02	4,75	3,63	1.72	1,36	0,58	2,38	3,1	0,32	0,59
64	Footwear, gaiters and the like; parts of such art	3,11	2,26	3,84	3,23	3.44	3,46	0,75	5,51	3,28	2,05	1,11
68	Art of stone, plaster, cement, asbestos, mica/sim	1,11	0,68	3,56	2,53	2.15	1,97	1,97	1,36	1,7	2,22	1,55
94	Furniture; bedding, mattress, matt support, cushi	4,22	2,68	3,18	2,14	2.43	0,26	0,64	2,09	3,12	0,07	0,28
84	Nuclear reactors, boilers, mchy & mech appliance;	21,23	19,97	1,38	1,77	5.35	0,54	0,47	0,64	1,53	0,18	0,35
87	Vehicles o/t railw/tramw roll-stock, pts & access	8,69	7,21	0,86	0,97	4.42	0,73	0,79	0,14	0,36	0,19	0,55
85	Electrical mchy equip parts thereof; sound record	6,8	5,61	0,47	0,44	4.37	0,26	0,16	0,14	0,36	0,63	0,72

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Spain

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
69	Ceramic products.	1,84	1,11	4,96	3,98	3.80	1,36	0,58	2,38	3,1	0,32	0,59
87	Vehicles o/t railw/tramw roll-stock, pts & access	23,53	15,58	2,34	2,1	4.48	0,73	0,79	0,14	0,36	0,19	0,55
64	Footwear, gaiters and the like; parts of such art	1,8	1,01	2,22	1,45	3.28	3,46	0,75	5,51	3,28	2,05	1,11
89	Ships, boats and floating structures.	1,28	0,42	1,72	0,54	-0.58	0,03	4,19	1,12	1,66	0,29	1,37
94	Furniture; bedding, mattress, matt support, cushi	1,79	1	1,35	0,79	3.17	0,26	0,64	2,09	3,12	0,07	0,28
84	Nuclear reactors, boilers, mchy & mech appliance;	9,77	8,3	0,64	0,74	6.35	0,54	0,47	0,64	1,53	0,18	0,35
85	Electrical mchy equip parts thereof; sound record	7,37	5,3	0,51	0,42	5.09	0,26	0,16	0,14	0,36	0,63	0,72

Portugal

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
63	Other made up textile articles; sets; worn clothi	3,38	1,21	11,41	3,55	-0.64	1,63	0,09	4,99	3,57	8,35	4,12
64	Footwear, gaiters and the like; parts of such art	6,89	3,77	8,53	5,38	2.44	3,46	0,75	5,51	3,28	2,05	1,11
61	Footwear, gaiters and the like; parts of such art	8,02	3,58	5,95	2,95	0.96	3,21	1,71	4,47	3,61	3,21	1,71
69	Ceramic products.	1,95	1,27	5,25	4,55	3.75	1,36	0,58	2,38	3,1	0,32	0,59
62	Art of apparel & clothing access, not knitted/cro	5,24	1,8	3,18	1,67	-0.91	0,07	0,03	4,85	2,97	5,26	2,42
87	Vehicles o/t railw/tramw roll-stock, pts & access	14,74	10,02	1,46	1,35	4.04	0,73	0,79	0,14	0,36	0,19	0,55
85	Electrical mchy equip parts thereof; sound record	13,44	8,13	0,94	0,64	3.18	0,26	0,16	0,14	0,36	0,63	0,72
84	Nuclear reactors, boilers, mchy & mech appliance;	5,59	6,56	0,36	0,58	8.18	0,54	0,47	0,64	1,53	0,18	0,35

Greece

ProductCode	Description	Share 1999	Share 2013	RCA 1999	RCA 2013	CAGR	RCA - BRA 1999	RCA - BRA 2013	RCA - CHN 1999	RCA - CHN 2013	RCA - IND 1999	RCA - IND 2013
52	Cotton.	5,03	1,6	9,18	4,2	0.31	10,85	8,82	3,08	2,09	0,39	1,05
61	Art of apparel & clothing access, knitted or croc	10,97	1,37	8,13	1,13	-6.18	3,21	1,71	4,47	3,61	3,21	1,71
76	Aluminium and articles thereof.	4,66	4,34	4,34	5,13	8.33	0,63	0,72	0,4	1,07	0,63	0,72
68	Art of stone, plaster, cement, asbestos, mica/sim	1,11	0,56	3,57	2,11	3.71	2,22	1,55	1,36	1,7	2,22	1,55
74	Copper and articles thereof.	1,39	1,83	2,37	2,12	11.05	0,45	0,5	0,54	0,37	0,39	1,05
84	Nuclear reactors, boilers, mchy & mech appliance;	4,57	2,68	0,3	0,24	4.79	0,54	0,47	0,64	1,53	0,18	0,35
85	Electrical mchy equip parts thereof; sound record	4,37	3,53	0,3	0,28	7.23	0,26	0,16	0,14	0,36	0,63	0,72
87	Vehicles o/t railw/tramw roll-stock, pts & access	0,66	0,55	0,07	0,07	7.39	0,73	0,79	0,14	0,36	0,19	0,55

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