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Macroeconomic policy regimes and the dynamics of demand-led growth regimes in advanced and emerging economies

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Macroeconomic policy regimes and the dynamics of demand-led growth regimes in advanced and emerging economies

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Abstract
This paper investigates the drivers of economic growth by focusing on macroeconomic policy regimes (MPRs) as a key dimension of demand and growth regime (DGR) and growth model (GM) analysis. Building on Campana and Hein's (2026) results on demand-led growth decomposition based on the national income and financial accounting (NIFA) and the Sraffian supermultiplier (SSM) approaches for seven economies—Germany, Spain, Argentina, Brazil, India, South Africa, and Turkey—across the periods 2000–2007 and 2011–2019, this paper applies the MPR approach to understand the differences in DGRs and their respective changes. The paper thus contributes to post-Keynesian and comparative political economy literature. The analysis shows that the configuration and coordination of monetary, wage, fiscal, and external policies play a central role in shaping dominant sources of autonomous demand and explaining regime shifts over time. While some countries, such as Germany and India, display stability in their MPRs, DGRs, and dominant autonomous demand components, others—Spain, Brazil, South Africa, and Turkey—have undergone significant transformations driven by policy changes and external conditions. Overall, the findings highlight the explanatory power of MPR analysis in understanding growth trajectories and provide foundations for the examination of the political economy dimension of these trajectories.

Keywords: macroeconomic policy regimes, growth decomposition, post-Keynesian macroeconomics, growth drivers, growth models, demand and growth regimes
JEL Codes: E11, E12, E60, F43, O57

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1. Introduction

The concept of post-Keynesian (PK) demand and growth regimes (DGRs) has become widely adopted in empirical analyses of comparative and international political economy (CPE, IPE) since its rediscovery by Baccaro and Pontusson (2016) and the subsequent development of the growth models (GM) literature. This cross-fertilization has generated a rich interdisciplinary research programme (Akcay et al., 2023, 2024; Baccaro et al., 2022), alongside contributions from PK economics addressing misunderstandings in the new GM literature and highlighting its distinctive contributions to political economy analysis (Hein, 2023b; Stockhammer, 2022; Stockhammer & Kohler, 2022). Within the latter, Hein (2023b) proposes to distinguish the following complementary levels of analysis of DGRs or GMs[1]:

1. The national income and financial accounting (NIFA) decomposition approach focusses on sources of demand growth and their financing. Since the approach is based on accounting conventions, it is foundational and compatible with any theory of growth drivers.
2. The Sraffian supermultiplier (SSM) growth decomposition distinguishes between components considered autonomous from current output and income and components that are induced and therefore dependent on them.
3. The analysis of growth drivers identifies the main determinants of the dynamics of the different demand components. This may include distribution (functional income, personal income, wealth), financial boom-bust cycles, house and commodity prices dynamics, the relevance of multinational enterprises and foreign direct investment in interaction with government policies, and macroeconomic policy regimes (MPRs) as a whole.
4. The political economy level identifies the socio-institutional forces behind growth drivers by focusing on growth strategies of different social groups, and on the concepts of growth coalitions and dominant social blocs.

Campana and Hein (2026) applied the NIFA and the SSM demand-led growth decomposition approaches, corresponding to the first two levels of analysis, to seven countries in a comparative framework: Germany and Spain as advanced capitalist economies (ACEs), and Argentina, Brazil, India, South Africa, and Turkey as emerging capitalist economies (ECEs). Following this, they analysed the structure of international trade for these countries and provided a typology of export-led regimes.

This contribution turns to the third level of analysis and examines growth drivers for the same set of countries. The focus is on MPRs, as this allows for a direct link with the fourth level of analysis, the political economy dimension, in future work. The paper analyses to what extent the MPRs have shaped the DGRs, as well as the respective changes between the period before the Global Financial Crisis (GFC) and the Great Recession (GR), 2000-2007, and the following period up to the Covid-19 Crisis, 2011-2019. The empirical exercise illustrates the complementarity between different levels of analysis in examining structurally diverse advanced and emerging economies.

The paper is structured as follows. Section 2 briefly summarises the results of Campana and Hein (2026) for the seven countries with respect to the NIFA and SSM demand-led growth

[1] In the remainder of this paper, we use these terms interchangeably.

decompositions. Section 3 introduces the concept of MPRs, while Section 4 applies this concept to the seven countries. Section 5 summarises and concludes.

2. Demand-led growth decomposition and growth models – results from Campana and Hein (2026)

Campana and Hein (2026) applied the NIFA and the SSM demand-led growth decompositions to Germany, Spain, Argentina, Brazil, India, South Africa, and Turkey for two subperiods, 2000-2007 and 2010-2019.[2] The NIFA approach, initially introduced by Hein (2011, 2012), considers the growth contributions of the demand aggregates (private consumption, public consumption, investment, and net exports) and the financial balances of the different sectors of the economy (private, public, and external). While the growth contributions provide information about the sources of demand, the financial balances contain information on the financing side. This gives rise to the regime classification shown in Table 1. The results for the countries are presented in Table 2.

Table 1. Classification of demand-led growth regimes according to sources and financing of demand components

Export-led mercantilist (ELM)	• positive financial balances of the private sector, and the private household sector, • negative financial balances of the external sector, • positive balance of goods and services, • positive growth contributions of net exports.
Weakly export-led (WEL)	Either • positive financial balances of the private sector, • negative financial balances of the external sector, • positive balance of goods and services, • negative growth contributions of net exports. or • negative but improving financial balances of domestic sectors, • positive but declining financial balances of external sector, • negative but improving net exports, • positive growth contributions of net exports.
Domestic demand-led (DDL)	• positive financial balances of the private household sector and positive or balanced financial balances of the private sector as a whole, • balanced or positive financial balances of the external sector, • domestic demand is the almost exclusive source of growth, • around zero growth contribution of net exports.
Debt-led private demand boom (DLPD)	• negative or close to balance financial balances of the private sector, • positive financial balances of the external sector, • significant growth contributions of domestic demand, and private consumption demand in particular, • negative growth contributions of net exports.

Source: Based on Dünhaupt and Hein (2019, p. 458).

[2] For a detailed presentation of the NIFA and SSM demand-led decomposition approaches and a review of previous studies applying them, see Campana and Hein (2026). Summa et al. (2025) provide an alternative discussion on demand-led growth accounting.

Table 2. NIFA demand and growth regime changes from the period 2000-07 to the period 2011-19

		2011-2019			
		Debt-led private demand (DLPD)	Domestic demand-led (DDL)	Weakly export-led (WEL)	Export-led mercantilist (ELM)
2000-2007	DLPD		South Africa		Spain
	DDL		India	Brazil; Turkey	
	WEL				
	ELM		Argentina		Germany

Source: Campana and Hein (2026, p. 12).

According to Campana and Hein (2026), Germany maintained an export-led mercantilist (ELM) regime in both periods. It showed positive growth contributions of net exports, a positive balance of goods and services and negative financial balances of the external sector. Exports clearly displayed the strongest dynamics. In the second period, however, domestic demand contributions increased, weakening the ELM nature of the DGR without changing it.

Spain shifted from a debt-led private demand (DLPD) regime to an ELM regime, associated with a significant fall in the growth rate in the second period. In the first period it showed significant growth contributions from private domestic demand and negative contributions of net exports, as well as negative financial balances in the private sector and positive balances in the external and public sectors. In the second period, both the financial balances and the net exports contributions reversed their sign. However, the latter was largely due to a fall in the negative contribution of imports. The growth contributions of private domestic demand also fell significantly.

Argentina changed from an ELM to a domestic demand-led (DDL) regime while experiencing a sharp fall in its growth rate. In the second period there was a strong decline in the contribution of exports, which turned the contribution of net exports negative. The negative external sector balance also reversed sign, and there was a considerable increase in the public sector deficit. With a negative contribution from investment, the main sources of growth in the 2011-2019 period were private and public consumption.

Both Brazil and Turkey moved from a DDL regime to a weakly export-led (WEL) regime. Growth was almost exclusively based on domestic demand in both countries in the first period. However, the second period in Brazil saw the domestic demand contribution and the growth rate fall sharply, while in Turkey they remained relatively stable. The contribution of net exports in Brazil also declined but remained positive. In Turkey, the negative contribution of imports fell considerably more than that of exports and turned the contribution of net exports to GDP growth positive.

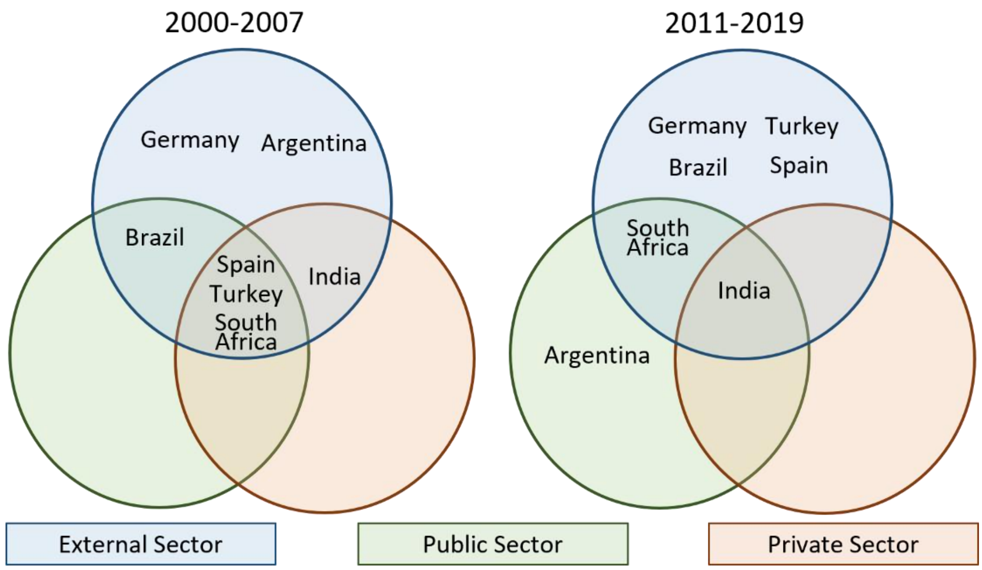
India's DDL regime did not change across periods. It remained characterised by high growth contributions from private domestic demand, balanced or positive external financial balances, and significantly negative public sector balances.

South Africa shifted from a DLPD regime to a DDL regime, accompanied by a significant fall in GDP growth. The economy showed negative contributions of net exports and current account deficits in both periods. In the second period, domestic demand and private consumption played a dominant role, while the public deficit increased significantly and the private sector financial balance turned positive.

For the SSM demand-led growth decomposition, initially applied by Freitas and Dweck (Freitas & Dweck, 2013) to Brazil, a distinction is made between the autonomous demand components (autonomous private consumption, residential investment, government consumption and investment expenditures, and exports) and the income-induced demand components (income-financed private consumption, private investment, and imports). GDP growth is thus composed of the growth contributions of the autonomous components and of the contributions derived from changes in the inducements to consume, invest and import, i.e., from changes in the supermultiplier. Since the supermultiplier was not constant in the sample countries, Campana and Hein (2026) calculated both sets of contributions, but focused on the dynamics of the autonomous sources of demand growth in order to group the countries.

Figure 1 presents the classification based on the dominant contributions of autonomous demand components to growth by sectors: the external sector (exports), the public sector (government consumption and investment), and the private sector (private households' credit-financed consumption, as a medium-run proxy for autonomous private consumption, and residential investment).

Figure 1. SSM demand-led growth de-composition: dominant autonomous demand components



Source: Campana and Hein (2026, p. 16).

In the first period, for all the countries of the sample, exports were the strongest dominant autonomous demand component. In Spain, the contribution of private households' demand reached the same level as exports, and this sector was also important and considered dominant in India, South Africa and Turkey. In the latter two countries, and also in Brazil and Spain, the public sector was dominant as well.

In the second period, exports remained the only dominant autonomous demand component in Germany, and also became the only dominant source in Spain, Brazil and Turkey. In this period, exports dominated in India together with private and public sector demand. In South Africa, exports dominated together with government autonomous expenditures, while in Argentina, government expenditures were the only dominant autonomous demand component.

The SSM approach thus shows an even more pronounced shift towards exports as the main source of demand (except for Argentina) than the NIFA approach.

3. Growth drivers and the concept of macroeconomic policy regimes

The analysis of growth drivers focusses on the main determinants of dynamics in the different demand components and thus on the regime changes identified by the NIFA and SSM demand-led growth decompositions. Several authors making use of these decomposition approaches have already considered growth drivers, including income distribution, housing and financial asset prices, private households' debt-income ratios, international competitiveness and macroeconomic policy indicators, or welfare state models.[3]

Kohler and Stockhammer (2022) were the first to provide a systematic cross-country analysis of the underlying growth drivers before and after the 2007-09 crises in 30 OECD countries. To explain the shift towards the post-crises patterns, they considered the requirements of deleveraging in the context of a financial boom-bust cycle, the role of fiscal policies, and the relevance of price and non-price competitiveness for exports. They found that the first two drivers played a major role, i.e. the need for deleveraging generated by high private debt and the (lack of) expansionary deficit-financed fiscal policies. They also found that differences and changes in international price competitiveness were not systematically related to growth performance and thus have been overstated in parts of the previous CPE literature on macroeconomic regimes.

Jungmann (2023) extended the approach of Kohler and Stockhammer (2022) to a set of 19 ECEs (2000-2019), further including indicators for income distribution, vertical integration, multinationals, and commodity price dynamics as additional determinants of GDP growth. He only found non-price competitiveness as a robust driver. Furthermore, private debt and expansionary fiscal policy were important after the 2007-09 crises. Feliciano et al. (2025b, 2025a) have analysed the relevance of a similar set of growth drivers for Spain and other EU countries (2000-2019) for different periods with mixed results.

'House-price-driven growth models' were proposed by Kohler et al. (2023) in order to explain growth dynamics over time and across countries. They argued that house price dynamics are a main driving force of economic growth – and its decline. They showed for a cross-country dataset of 32 OECD countries (1970-2019) that homeownership rates and mortgage-credit encouraging institutions are positively correlated with the volatility of house price cycles and thus explain the country differences in growth dynamics. Stockhammer and Novas Otero (2023), investigating growth drivers in Southern Europe (Greece, France, Italy, Portugal, Spain) since the mid-1990s, found that house price dynamics and the fiscal policy stance had a major impact. The findings of Wood and Stockhammer (2024) support the

[3] For a review of PK studies on growth drivers see Hein (2023b).

relevance of house prices for household debt and GDP growth for a set of 18 advanced economies (1980-2019).

While fiscal policies figure prominently in some of the contributions reviewed so far, Hein and Martschin (2021) argued that looking at just one policy indicator as growth driver may be too narrow. Instead, they focussed on macroeconomic policies as growth drivers. In an attempt at understanding the role of macroeconomic policies for regime shifts of the big four Eurozone countries, Germany, France, Italy and Spain, they linked this approach with the PK notion of MPRs developed and applied in the early 2000s (Hein & Truger, 2005, 2009; Herr & Kazandziska, 2011).[4]

The concept of an MPR has been used to assess international and intertemporal differences in macroeconomic performances of countries or regions. It describes monetary, fiscal, and wage policies, their coordination and interaction within the institutional background of an economy, including the degree of openness and the exchange rate regime. This concept supposes that macroeconomic policies and aggregate demand have not only short-run effects on economic performance, as in New Consensus Macroeconomics (NCM) (Carlin & Soskice, 2015), the theoretical backbone of the Varieties of Capitalism (VoC) approach (Hall & Soskice, 2001), but also have a long-run impact on output, income, employment, inflation, distribution, and growth through various channels, as shown in PK macroeconomics (Hein, 2014, 2023a). The PK macroeconomic policy mix proposed by Arestis (2013), Hein (2023a, Chapter 6) and Hein and Stockhammer (2010), among others, is used as a benchmark supporting a stable DDL regime, whereas deviations from this benchmark contribute to moving to the unstable DLPD or ELM regimes with detrimental long-run effects on macroeconomic performance.

Central bank monetary policies are evaluated, emphasising the relationship between long-term interest rates and GDP growth. A monetary policy that supports employment, economic growth, and a stable DDL regime should target a slightly positive real interest rate (i_r) that remains below the real GDP growth rate ($\hat{Y}$):

$$0 \leq i_r \leq \hat{Y} \tag{1}$$

Although central banks cannot directly control long-term real interest rates, they can control short-term nominal money market rates. The use of this and other tools, such as open market operations in financial markets, will affect long-term nominal rates and, considering some persistence in inflation trends, also long-term real rates beyond the short run. The central bank's impact might be asymmetric. Raising short-term rates will always drive-up long-term rates, whereas lowering short-term rates might not bring long-term rates down, if the economy is in a deep and persistent recession characterized by rising risk assessments and liquidity preference of financial and non-financial actors. Furthermore, long-term interest rates may be affected by country-specific default risk assessments giving rise to a currency premium, which is adversely related to the long-term interest on debt issued in that currency

[4] Priewe and Herr (2005) and Kazandziska (2019) extended this approach to ECEs, including further features, like the financial system or industrial policies.

(De Paula et al., 2017; Fritz et al., 2018). For these reasons, both short- and long-term real interest rates are considered, too, assuming that they have a particular impact on residential investment.

For wage policy, it is examined whether nominal unit labour costs (NULCs) have contributed to stabilising inflation and thus grown at the target rate of inflation of the respective country. This requires the difference between nominal wage growth ($\widehat{w}$) and the long-run average growth of economy-wide labour productivity ($\hat{y}$) to equal the target inflation rate ($\hat{p}^T$), such that NULC growth contributes to reaching this target. From this we can derive the following benchmark for nominal wage growth:

$$\widehat{w} = \hat{p}^T + \hat{y} \tag{2}$$

Furthermore, since changes in NULC growth will not proportionally affect the rate of inflation because of incomplete pass-through, changes in functional income distribution, i.e. in the labour income share, are also considered. For the assessment of the effects of wage policies via functional income distribution on demand and employment, the nature of the distribution-led growth regime has to be taken into account. As the review of empirical studies in Jungmann (2023) shows, for Argentina, Brazil, India, South Africa, and Turkey, domestic demand was estimated to be wage-led in all studies available. Including the effects of distribution on net exports, the results for these countries are mixed: some studies found wage-led total demand while other found profit-led results. For Germany and Spain, almost all studies found wage-led domestic and total demand regimes (Hein, 2014, Chapter 7; Hein & Vogel, 2008; Naastepad & Storm, 2007; Onaran & Galanis, 2014; Onaran & Obst, 2016).

For fiscal policy, deliberate and discretionary interventions should be considered, as included in the PK macroeconomic policy mix for real government expenditures (G_r):

$$G_r = G_{r0} + G_{r1}(e^T - e), \qquad G_{r0} \geq 0, G_{r1} > 0 \tag{3}$$

with G_{r0} as the expenditure level to reach a target employment rate e^T associated with non-inflationary full employment, and G_{r1} as the counter-cyclical reaction coefficient towards deviations of the employment rate from the target rate. Hein and Martschin (2021) assessed the short-term discretionary responsiveness of fiscal policies by examining the changes in the cyclically adjusted budget balance-potential GDP ratio (CBR) and related these changes to shifts in the output gap (OG). Their approach thus neither directly engaged with equation (3) nor equated potential output with the target level of full employment output, acknowledging the well-documented empirical measurement challenges and the endogeneity issues associated with potential output (Heimberger & Kapeller, 2017). Consequently, the focus is solely on the annual changes in CBRs and OGs, rather than on their levels. When OGs and CBRs move in the same direction, fiscal policies are deemed counter-cyclical, as governments reduce (increase) structural deficits or increase (reduce) structural surpluses during an economic upswing (downswing). Conversely, when OGs and CBRs move in opposite directions, fiscal policies are identified as pro-cyclical, with governments decreasing (increasing) structural deficits or increasing (reducing) structural surpluses during an economic downswing (upswing). Counter-cyclical fiscal policies dampen the cyclical fluctuations of GDP, while pro-cyclical policies accelerate them. Additionally, public investment-GDP ratio is considered as an indicator of the growth orientation of fiscal policies (Aschauer, 1989).

Finally, open economy conditions are taken into account, recognizing their influence on both the effectiveness of domestic macroeconomic policies and the overall demand and growth regime. Following Hein and Martschin (2021), we look at the degree of openness indicated by export and import shares of GDP, as well as the evolution of price competitiveness, which is measured using real effective exchange rates (REER). An increase in the REER signifies a currency appreciation and thereby a loss of international price competitiveness. Following the approach of Kohler and Stockhammer (2022), we incorporate the Economic Complexity Index (ECI) to address non-price competitiveness.

In the following section, we present the indicators of the MPRs in the seven countries during the two periods under examination, and we link the MPRs to the DGRs and the dominant sources of autonomous demand. However, this does not imply that the MPRs were the only determinants of the respective DGRs or autonomous sources of demand. Financial boom-bust cycles, house price cycles and commodity price cycles in commodity exporting countries may also have played a role. We will refer to these and the respective literature in each case.

4. Macroeconomic policy regimes in seven selected countries, 2000-2007 and 2011-2019

Applying the indicators for the MPRs introduced in the previous section, we obtain the average values for the two periods presented in Tables 3 and 4. Annual values for the respective indicators are displayed in the Figures in Appendix B.

Table 3. Real GDP growth and macroeconomic policy regime indicators. Annual averages for the periods 2000-2007 and 2011-2019.

	Germany		Spain		Argentina		Brazil		India		South Africa		Turkey	
	2000-2007	2011-2019	2000-2007	2011-2019	2000-2007	2011-2019	2000-2007	2011-2019	2000-2007	2011-2019	2000-2007	2011-2019	2000-2007	2011-2019
Real GDP growth, %	1.57	1.73	3.63	1.20	3.46	0.41	3.62	0.77	6.49	6.43	4.29	1.60	5.52	5.57
Monetary policy														
Short-term (ST) real interest rate, %	2.3	-1.5	-0.7	-0.4	0.7	-8.1	8.6	3.1	1.8	2.2	1.1	0.6	10.0	2.3
Long-term (LT) real interest rate, %	3.4	-0.8	0.5	2.3	0.6	14.1	11.2	5.2	2.8	1.7	3.2	3.0	11.0	0.9
LT real interest rate minus real GDP growth, pp.	1.8	-2.5	-3.2	1.1	-3.1	13.7	7.7	4.4	-3.7	-4.9	-1.1	1.4	5.5	-4.7
Wage policy														
Nominal unit labor cost (NULC), annual growth, %	0.0	2.2	3.1	-0.0	10.9	33.0	9.0	7.2	4.9	5.4	5.9	6.1	18.8	10.1
Inflation rate (HCPI), %	1.7	1.4	3.2	1.2	9.8	32.4	7.3	5.9	4.7	6.1	5.3	5.3	27.3	10.0
Adjusted wage share, current prices, %	57.1	57.5	56.5	54.2	40.8	57.6	57.0	60.0	56.6	56.8	50.7	55.1	47.7	44.4
Fiscal policy														
Cyclically adjusted budget balance (% of potential GDP), annual change, pp.	0.2	0.5	0.2	0.2	0.5	-0.2	0.0	0.0	0.5	0.2	0.3	-0.2	1.0	-0.3
Output gap (% of potential GDP), annual change, pp	0.2	0.3	0.3	0.9	0.1	-0.5	0.2	-0.4	-0.1	0.3	0.7	0.2	1.9	-0.2
Number of years with procyclical fiscal policy (c: contractionary, e: expansionary)	5 (3c, 2e)	7 (4c, 3e)	5 (4c, 1e)	7 (2c, 5e)	5 (2c, 3e)	9 (5c, 4e)	1 (0c, 1e)	4 (2c, 2e)	3 (2 c, 1 e)	7 (3 c, 4 e)	1 (1c, 0e)	6 (2c, 4e)	3 (1c, 2e)	4 (2c, 2e)
Public investment, % of GDP	2.4	2.5	3.6	2.4	2.1	3.3	2.2	2.4	3.2	3.8	2.6	3.2	2.9	3.5
Open economy														
Change in real effective exchange rate (REER), %	-1.2	0.7	1.8	-1.4	-7.5	-5.8	11.0	-2.0	1.6	0.2	0.3	-2.5	-2.3	-0.3
Economic Complexity Index (ECI) Trade	1.9	1.9	1.0	0.9	0.4	0.3	0.6	0.6	0.1	0.4	0.4	0.3	0.0	0.5
Ranking ECI Trade	1.9	3.2	21.6	28.3	37.3	49.6	30.8	38.1	47.3	46.0	36.0	51.1	51.1	43.3
Real exports of goods and services, % of GDP	31.2	41.9	26.3	33.0	23.3	20.9	10.6	11.6	15.9	22.2	30.0	27.1	22.7	24.9
Real imports of goods and services, % of GDP	27.3	35.2	30.2	30.1	17.0	26.4	7.7	11.7	17.4	25.4	23.2	28.2	25.9	27.1

Notes: 'pp' indicates percentage points. See Appendix A for definitions, specific notes for each variable regarding construction and availability, and detailed data sources.
Sources: European Commission (2024), IMF (2025b), OECD (2025b), BCRA (2025), World Bank (2025), IMF (2025c), OECD (2026a), CEPED (2022), INDEC (2026), MoSPI (2025), Eurostat (2025), IMF (2024), MECON (2026), ILO (2026), IMF (2025a), OECD (2026b), OECD (2025a), MECON (2025), INDEC (2025), BIS (2025), OEC (2025); authors' calculations and presentation.

Table 4. Macroeconomic policy regimes. Annual average stances for the periods 2000-2007 and 2011-2019.

	Germany		Spain		Argentina		Brazil		India		South Africa		Turkey	
	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019	2000 - 2007	2011 - 2019
Monetary policy	-	+	+	-	+	-	-	-	+	+	+	-	-	+
Wage policy	-	+	-	-	+	+	+	+	-	0	-	+	-	0
Fiscal policy	-	-	-/+	+/-	0/+	0/+	+/0	0	-/0	0/+	0/-	+	0/+	0/+
Open economy	+	0/+	-	+/-	+/-	+/-	-/0	0/-	-/+	0/+	0/-	+/-	+/0	0/+
Demand and growth regime (NIFA)	ELM	ELM	DLPD	ELM	ELM	DDL	DDL	WEL	DDL	DDL	DLPD	DDL	DDL	WEL
Dominant component of autonomous demand (SSM)	Ex	Ex	G, HH, Ex	Ex	Ex	G	G, Ex	Ex	HH, Ex	G, HH, Ex	HH, Ex	Ex	G, HH, Ex	Ex

Note: expansionary stance (+), contractionary stance (−), neutral stance (0). Export-led mercantilist (ELM), weakly export-led (WEL), domestic demand-led (DDL), debt-led private demand (DLPD). Exports (Ex), government consumption and investment (G), private households' credit-financed consumption and residential investment (HH).
Sources: authors' presentation.

4.1 Germany

Germany's MPR significantly contributed to the dominance of exports as autonomous growth component and to the ELM DGR, as found in Campana and Hein (2026), in the period 2000-2007. European Central Bank (ECB) monetary policies imposed a restrictive monetary policy stance on the German economy, with a considerably positive differential between the real long-term interest rate and real GDP growth until 2005. The restriction of private domestic demand was further exacerbated by suppressed nominal wage and NULC growth, which was even negative from 2004 until 2007. This contributed to inflation rates below the ECB target rate, to higher real interest rates compared to other Eurozone countries, and thus to the restrictive impact of ECB policies on the German economy. Suppressed nominal wage growth also led to a declining labour income share in a wage-led demand and growth economy. Fiscal policies, under pressure to meet the goals of the European Stability and Growth Pact, were pro-cyclical over five years, of which three years (2003 until 2005) were pro-cyclically contractionary and two years pro-cyclically expansionary (2001 and 2002). Furthermore, public investment was restrained since public investment-GDP ratio fell considerably after 2002 and on average was quite low in international comparison.[5] The suppression of domestic demand, enforced by the EU Maastricht regime, was accompanied by improving international price competitiveness, indicated by the fall in the REER – Germany benefitted from the nominal devaluation of the euro during its first years and from very low domestic inflation in this first period as a whole – and particularly by high non-price competitiveness, indicated by the ECI, based on the structural composition of German export goods. Overall, this resulted in exports as the main autonomous source of demand growth. This reliance on external demand generated current account surpluses and external sector deficits as main characteristics of the ELM DGR, leading to only mediocre growth in international comparison, and contributing to the current account imbalances before the GFC and the GR, at the global scale and within the Eurozone (Detzer & Hein, 2016b, 2016a; Hein, 2013; Hein & Martschin, 2020; Hein & Truger, 2012).[6]

In the period 2011-2019 we observe a gradual shift in Germany's MPR, without changing the dominance of exports as autonomous demand growth component and the ELM DGR. Falling and then zero nominal short-term interest rate policies of the ECB since March 2016 (ECB, 2025) as a response towards the Eurozone crisis and the following stagnation, together with low country-specific risk with regard to long-term nominal interest rates, turned the respective real rates in Germany negative. The real long-term interest rate-real GDP growth differential was thus consistently negative since 2010, indicating a positive effect of ECB monetary policies on German growth in this period. Wage policies contributed to this expansionary stance, with NULC growth close to the ECB target inflation rate. Since actual inflation in Germany remained below that rate, the labour income share slightly increased. Fiscal policies failed to act counter-cyclically in most years of this second period, and were instead pro-cyclically contractionary in four years and pro-cyclically expansionary in three

[5] See also Hein and Martschin (2021) for a comparison to other Eurozone countries.

[6] For a detailed study on financialisation and the financial and economic crises, 2007-09, in Germany, see Detzer and Hein (2016b) and in particular Detzer et al. (2017).

years. The introduction of the 'debt brake' limited federal budget expenses (Detzer & Hein, 2016b). The public investment-GDP ratio remained low in international comparison (Hein & Martschin, 2021), however with a rising trend in the second half of this period. Overall, the autonomous growth contribution of public expenditures increased somewhat compared to the first period, as shown in Campana and Hein (2025, 2026), however without replacing the dominance of exports as dominant autonomous growth component. The open economy conditions for exports remained favourable. International price competitiveness of German producers in international markets, measured by the REER, only slightly decreased, while non-price competitiveness, indicated by the ECI, remained high. The shift in the MPR towards an expansionary stance of monetary and wage policies thus moderated the export-led nature of the German DGR without fundamentally changing it. But these policies contributed to a slight increase in the average real GDP growth from the first to the second period. These results are in line with what was reported by Campana and Hein (2025) and Hein and Martschin (2021) for the German MPR, albeit for slightly different periodisations.

4.2 Spain

For the period 2000-2007, in Campana and Hein (2026), Spain was classified as a DLPD economy, with households' credit financed consumption and residential investment as main autonomous growth components, together with government expenditures and exports. This was supported by the MPR in the following ways. Spain saw a strongly expansionary monetary policy stance, with long-term real interest rates considerably below real GDP growth. High inflation, driven by NULC growth well above the ECB inflation target led to relatively low real interest rates in Spain, with short-term rates being negative and long-term rates only slightly positive. Together with easy access to credit this stimulated deficit-financed real estate investment and private consumption.[7] In the face of high NULC growth but even higher inflation, the labour income share fell relative to the previous decade. In a wage-led economy like Spain, this should have dampened private consumption and aggregate demand. However, this was not the case because of the expansionary effects of credit-financed household consumption and residential investment, which thus became dominant sources of autonomous demand growth. Spain followed a pro-cyclical fiscal policy stance in five years, with four years of pro-cyclically contractive policies, i.e. CBRs rising while OGs were falling (2002 until 2005). But a high public investment-GDP ratio was conducive to aggregate demand and growth and made government expenditures a main contributor to autonomous demand growth in this period. High NULC growth and inflation contributed to the increase in Spain's REER and the associated loss in international price competitiveness, with comparatively low non-price competitiveness as indicated by the low ECI. Although exports were a source of autonomous demand growth, Spain displayed negative growth contributions of net exports and high current account deficits.

In the 2011-2019 period, the Spanish MPR changed considerably and contributed to the shift of the DGR towards an ELM regime, and towards exports becoming the sole dominant autonomous demand component (Campana & Hein, 2026). After the financial crisis, Spanish

[7] For a detailed study on financialisation and the financial and economic crises, 2007-09, in Spain, see Ferreiro et al. (2016).

households and corporations had to reduce financial liabilities and deleveraged heavily while credit standards tightened (Ferreiro et al., 2016). The monetary policy stance became restrictive, in particular until 2014, with real long-term interest rates exceeding real GDP growth. Spreads between short- and long-term nominal rates increased for Spain in particular in the course of the Eurozone crisis starting in 2010 (Hein, 2013). Only in 2015 monetary conditions eased, when Spain's growth performance gradually improved, financial markets calmed, and the ECB increasingly made use of unconventional monetary policies in order to bring long-term nominal interest rates down. Wage policies turned deflationary under the pressure of high unemployment and structural reforms of the labour market. NULC growth became negative and only turned positive since 2017. The labour income share also fell until 2017, depressing domestic demand further. Spain implemented pro-cyclical fiscal policies in seven out of nine years, with two years of procyclical restrictive policies until 2013, when the economy was suffering from the Eurozone crisis and the related austerity policies imposed by the EU Stability and Growth Pact, and five years of pro-cyclical expansionary polices from 2015 until 2019. The public investment-GDP ratio in the second period heavily suffered and reduced to the German level. Wage moderation and lower inflation contributed to a falling REER, hence to an improvement of international price competitiveness, to exports becoming the main autonomous source of demand growth while the contribution of imports fell, enabling an ELM DGR. However, this change in the MPR contributed to a significant fall in average real GDP growth in the second period. This assessment of the Spanish MPR is in line with what was found in Hein and Martschin (2021) in their analysis of DGRs and MPRs, with a slightly different periodisation. Our results for the pre-GFC and GR period in Spain are complementary to the findings by Feliciano et al. (2025b) for the same period. The authors provide an examination of Spanish DGRs making use of the NIFA approach, complemented by analyses of growth drivers, looking at indicators of financialisation, income distribution and fiscal policies. Their results are difficult to compare with ours for the second period, as their post-crisis period only covers the years 2014-2019. They found a self-financed domestic demand regime and contested the expansionary effects of exports and its determinants – which, however, were not explicitly examined.[8]

4.3 Argentina

During the first period of analysis, 2000-2007, Argentina was classified by Campana and Hein (2026) as an ELM economy with exports as the dominant autonomous demand component. Argentina was significantly affected by the systemic crisis of 2001-2002, when the monetary and exchange rate regime collapsed and the country defaulted on its public debt, with dire socio-economic consequences. Beyond the subsequently favourable international conditions, with global liquidity and high commodity prices, the MPR played a role in the economic recovery, which took place alongside the establishment of a new developmentalist model

[8] There are several further problems with their indicators of growth drivers which cannot be discussed here for lack of space. For example, they use taxes and social transfers as indicators for fiscal policies, which are themselves endogenous to economic growth (automatic stabilisers), and which therefore should not be considered as growth drivers.

(Bozkurt Gungen, 2024). Average real interest rates were low during the period, and short-term ones were consistently negative after 2002. This rather expansionary monetary policy was also expressed in a negative long-term interest rate-GDP growth differential. The revitalization of collective bargaining agreements and the increase of the minimum wage (Etchemendy, 2019) led to NULC growth above inflation, with the latter showing an upward trend since 2005. In turn, wage developments contributed to the recovery of the wage share and domestic demand after the sharp contraction following the 2001-2002 crisis. Fiscal policy was pro-cyclical during five years, with an expansionary stance during the last three years of the period. Public investment also started to recover, but still remained at low levels on average. The strong real devaluation of the Argentinean peso in 2002 led to improved price competitiveness, which persisted in the following years. This was combined with improved terms of trade for a country that mainly exports primary goods and commodities, but it was accompanied by a decline in the ECI. Exports experienced a boost and the current account deficit reversed, with net exports contributing positively to growth, while imports also increased but failed to fully close the gap created during the crisis.

In the second period, 2011-2019, the DGR of Argentina shifted to a DDL regime mainly supported by autonomous government expenditures. This period involved significant changes to the country's political and economic structure, with Macri's presidency and a new economic model of trade liberalisation and financial deregulation (Allami et al., 2021). Monetary policy continued to show negative short-term real interest rates. However, real long-term rates rose sharply, notoriously with the currency crisis of 2018-2019. As a consequence, the differential with GDP growth turned positive, indicating an average contractionary stance during this period, at least with regard to long-term financing. Regarding wage policy, NULC growth tripled, and this contributed to an acceleration of inflation, which closely followed suit and reached high levels. Inflation targeting was adopted in 2016, but it was quickly abandoned two years later as a result of the new economic crisis, which also involved the return to an International Monetary Fund (IMF) program. At the same time, the adjusted wage share continued to improve until it peaked in 2016, contributing to income-financed domestic demand. Fiscal policy was pro-cyclical, alternating between contractionary and expansionary years. However, the average change in the CBR was expansionary, accompanied by a negative financial balance of the government sector. Additionally, the public investment-GDP ratio was considerably higher than in the previous period, which helped support aggregate demand. With regard to the external sector, non-price competitiveness continued to deteriorate and imports were more dynamic than the stagnant exports, which were also affected by the end of the commodity boom. Even with high inflation, the REER depreciated. It also showed high instability, and thus was unable to prevent renewed current account deficits. In the case of Argentina, changes in the MPR do not fully explain the shifts in the DGR or in the dominant components of autonomous demand. These shifts were also strongly influenced by various economic and political crisis, as well as the evolution of exogenous external conditions. Altogether, the deterioration of the open economy conditions meant that domestic components of aggregate demand became more relevant sources of growth in the second period. Although the MPR contributed to a greater role for autonomous government spending, it could not prevent economic stagnation compared with the previous export-led period. This is consistent with the view by Ianni (2024), although he adopts a slightly different periodisation and does not place the same importance on the government's role in the second period.

4.4 Brazil

For the first period, 2000-2007, Campana and Hein (2026) identified a DDL regime in Brazil, with exports and government expenditures as the dominant autonomous demand components. These years were marked by Lula's rise to presidency and the transition to a more developmentalist model. Brazil had a clear contractionary monetary policy stance at the beginning of the period, with high positive real interest rates and also a positive long-term real interest rate-GDP growth differential. These years coincided with the consolidation of the inflation-targeting framework established in 1999. NULCs grew above inflation, and contributed to the latter being higher than the target of the central bank, as well as to the increase of the wage share since 2005, which strengthened domestic demand (Carvalho & Rugitsky, 2015; Summa & Serrano, 2018). Fiscal policies were counter-cyclical during most of the period. Only 2006 showed a pro-cyclical expansionary stance. The public investment-GDP ratio remained low on average and declined until 2003, recovering thereafter. Lastly, high NULC growth and inflation, together with very high interest rates and international interest rate differentials that attracted foreign capital, were associated with an average growing REER and loss of price-competitiveness, while the ECI ranking remained fairly stable but at a relatively low level. The MPR did not particularly support the external sector but rather domestic private and public demand, consistent with a DDL regime. Nonetheless, amid the commodity cycle and high export prices, exports grew faster than imports, the current account deficit was corrected, and exports contributed positively to growth.

Brazil moved to a WEL DGR in the period 2011-2019, with exports as the only dominant autonomous demand component. This change of regime was also accompanied by a significant decline of economic growth. Although monetary policy maintained a contractionary stance, real interest rates and the positive long-term interest rate-GDP growth differential were not as high as in the previous period. That contractionary tendency was opposed by wage policy, which maintained a similar direction as before, with NULC growth and inflation both above the central bank's target. Despite a still growing wage share until 2015, rising income inequality and the fall of credit negatively affected domestic private consumption (Carvalho, 2018). Fiscal policy was procyclical in four out of nine years, with two years being expansionary and two contractionary. In 2016, a real government expenditure freeze was introduced (Haluska et al., 2026), coinciding with an average more contractionary fiscal stance since then. The public investment-GDP ratio remained stable on average, but there was a clear downward trend since 2014. The REER was volatile, but on average decreased, while the ECI deteriorated, price and non-price competitiveness thus showed opposite tendencies. Real exports continued to grow, but at a much slower pace, linked to the end of the commodity cycle, the fall in export prices and weaker external demand dynamics. Looking at the MPR, the shift to a WEL regime does not seem to have come from an improvement of external conditions. On the contrary, even though exports were the dominant autonomous demand growth component and sustained growth, they contributed much less than in the previous period. The shift in in the DGR and the growth slowdown were largely due to the stagnation in domestic demand, which was caused by the change in the MPR, particularly in fiscal policies. This result is consistent with the findings of Serrano and Summa (2015) and Campana et al. (2024) in explaining Brazil's economic performance during this period. Although none of these studies formally employs the MPR concept, both explain the slowdown in Brazil's economic growth using indicators that are also part of our MPR analysis.

4.5 India

India exhibited very high growth rates in international comparison on average during the entire period under analysis, and is the only other country from the sample besides Germany that maintained the same DGR over the two periods, in this case a DDL regime. The MPR contributed to this continuity. In the first period, 2000-2007, high growth and the dominance of autonomous private households' expenditures and exports was supported by expansionary monetary policy and high public investment, on the one hand, and the improvement of international non-price competitiveness, on the other hand. The monetary policy stance was expansionary in the first period, with positive but declining short- and long-term real interest rates, which remained well below real GDP growth. Since we face limited data coverage for wage policies during this period of analysis, we only point out that NULCs grew slightly below inflation towards the end of the period and the wage share was falling in these years, hence having a negative effect on domestic demand. Fiscal policies were procyclical in three years, with only one of them being expansionary, and with a relatively high public investment-GDP ratio. Regarding the open economy conditions, the REER increased, worsening international price competitiveness, while non-price competitiveness measured by the ECI index improved, indicating some technological upgrading. Real exports and imports grew considerably and increased their share in GDP, indicating India's increasing integration into global production and trade.

For the period 2011-2019, monetary policy maintained an expansionary stance, but we observe increasing real interest rates and a declining negative interest rate-GDP growth gap. In 2016, a flexible inflation targeting regime was adopted (Ahmed et al., 2022). Average NULC growth was located at the upper end of the monetary target's tolerance corridor (4±2%), whilst average inflation was slightly above this corridor. The wage share fell until 2015 but improved thereafter, such that it remained stable comparing the averages of second and first period. Pro-cyclical fiscal policy was present in seven years, out of which four were expansionary, and the public investment-GDP ratio increased. Also in this period, the REER remained more stable and only slightly increased, while the ECI index and ranking both improved. This period was marked by an increasing trade deficit, mainly due to India's higher growth than that of the trading partners, and an increase in the current account deficit. The MPR contributed to the continuity of the DDL regime in the second period via expansionary monetary policies and public investment, which led to including public sector expenditures as dominant autonomous demand component in the second period. Our results are in line with the analyses of Akcay et al. (2022) and Campana et al. (2024), who did not apply the MPR framework and used slightly different periodisations, but also found the continuity of India's DDL regime. Schedelik et al. (2021) also pointed out the stability of India's growth model, even though they downplayed the role of exports for its growth performance.

4.6 South Africa

For South Africa, Campana and Hein (2026) found a DLPD DGR in the 2000-2007 period, with a combination of government expenditures, private household credit-financed consumption and residential investment, together with exports, as main autonomous sources of demand growth. South Africa displayed a relatively higher degree of financialisation (private credit, stock market capitalisation, etc.) as compared to other ECEs with a large financial sector relative to GDP (Akcay et al., 2022; Newman, 2017).[9] This was accompanied by high and rising inequality in the distribution of income and wealth and by a falling wage share. Furthermore, in this period South Africa experienced high current account deficits with high short-term capital inflows, attracted by higher interest rates than in the Global North and thus a relevant carry trade from ACEs (Newman, 2014, 2017). Looking at the MPR for this period, we find that instead of high interest rates in international comparison, the monetary policy stance was expansionary, with long-term real interest rates falling short of real GDP growth. Since the wage share in national income was falling, wage policies had a contractionary impact on income-financed domestic demand. At the same time, NULC growth remained within the central bank's inflation target range of 3–6 per cent (South African Reserve Bank, 2025), contributing to keeping average inflation in that range. Fiscal policies were counter-cyclical in most years of the first period, in particular dampening the economic acceleration from 2004 to 2007. Pro-cyclical contractionary or expansionary fiscal policies were only observed in two years. The public investment-GDP ratio was rising, but remained low on average. Domestic demand was thus fuelled by rising private credit in particular. The REER slightly appreciated, thus slightly lowering international price competitiveness, while the ECI was low and the ranking deteriorated. The dynamics of imports, driven by credit fuelled domestic demand, thus exceeded the dynamics of exports driving net exports and the current account into deficit.

For the 2011-2019 period, South Africa was classified as DDL with government expenditures and exports as main sources of autonomous demand growth, associated with a significant fall in average real GDP growth as compared to the first period. The change in the MPR has contributed to this shift. While the GFC and the GR did not hit South Africa via financial contagion, the country suffered from the collapse of international trade and thus the contraction in exports (Newman, 2014, 2017), from which it did not fully recover in the post-crisis period, although exports were one of the main autonomous sources of real GDP growth. The improvement of international price competitiveness, i.e. the fall in the REER, was not able to compensate for the pressure on export revenues deriving from the end of the commodity cycle, as well as from a deteriorating ECI and falling ECI ranking, i.e. the loss of non-price competitiveness. Net exports and the current account thus showed an even higher deficit in the second period than in the first. Domestic demand was again a main source of demand in the period after the GFC and the GR. Fiscal policy had an expansionary stance with the public investment-GDP ratio rising considerably. Furthermore, fiscal policies were pro-cyclically expansionary in four years, and only slightly pro-cyclically contractionary in two years, with counter-cyclical policies in the other three years. Wage policies were also expansionary, with

[9] For a detailed study on financialization and the financial and economic crises, 2007-09, in South Africa, see Newman (2014).

NULCs only slightly above the upper bound of the central bank's corridor for the target inflation rate and inflation within that corridor. A significant increase in the wage share, supported by the expansion of public sector employment and the introduction of a national minimum wage (OECD, 2017), contributed to income-financed domestic demand, partly substituting the dynamic credit-financed private demand of the first period.[10] Contrastingly, monetary policies, albeit with slightly lower real interest rates, had a contractionary stance. The long-term real interest rate exceeded real GDP growth, which considerably lagged behind the growth rate of the first period. The dynamics of domestic demand were thus mainly supported by expansionary fiscal and wage policies.

4.7 Turkey

Finally, Turkey presented a DDL regime in the first period, 2000-2007, and all autonomous components were considered dominant (Campana & Hein, 2026). Similar to Argentina, Turkey experienced an economic collapse in 2001 that significantly affected its economic performance during the subsequent period. However, the path out of the crisis diverged, as a new neoliberal programme backed by the IMF was introduced to restructure the Turkish economy (Akcay, 2018). The MPR was shaped by these circumstances. Monetary policy was decisively contractionary for most of the period, combining high real interest rates that attracted short-term foreign capital with a positive long-term real interest rate-GDP growth differential. However, the contractionary bias in long-term interest rates eased towards the end of the period, with rates close to zero or even negative and long-term interest rate-real GDP growth differentials turning negative too. These developments occurred alongside an increase in the central bank's independence, entailing a strong focus on price stability and an inflation-targeting regime introduced in 2006. Wage policy mirrored interest rates in their restrictive stance. The evolution of NULCs was well below inflation, which started off very high at the onset of the crisis and then fell sharply to around 10%. This also led to a sharp fall in the wage share, which in a wage-led economy reduced domestic demand (Akcay et al., 2022). However, the growth in household debt mitigated this negative effect (Akçay & Güngen, 2022). Turkey followed pro-cyclical fiscal policies in three years and, although two of them were expansionary, the annual change of the CBR was positive during the period and therefore indicated an average reduction of the high public deficits and a more contractionary stance. Nonetheless, the public investment-GDP ratio showed an upward trend. Regarding the external sector, both the REER and the ECI ranking fell, indicating opposite developments in price and non-price competitiveness, respectively. Furthermore, whereas exports increased their share of GDP, imports, concentrated in energy, intermediate and capital goods(Bahçe et al., 2016), grew at a much faster rate leading to growing current account deficits. The MPR did not provide a boost to the economy, but it encouraged the inflow of foreign capital, which enabled rapid debt-financed post-crisis growth.

In the 2011-2019 period, Turkey returned to the previous path of high economic growth but with increased volatility, and it shifted to a WEL regime with exports as unique

[10] However, it must be taken into account that inequality of personal or household distribution of income in South Africa further increased in this second period, as indicated by the rise of the top income shares (Akcay et al., 2022).

dominant autonomous demand growth component. Real interest rates were much lower than in the previous period, but remained positive. However, the long-term interest rate-real GDP growth differential turned negative, indicating an expansionary monetary stance. This took place against a backdrop of mounting political pressure on the central bank to cut interest rates (Akcay, 2026; European Commission, 2019), as well as the onset of the reversal in the global financial cycle (Orhangazi & Yeldan, 2023). Average NULC growth was in line with inflation, but both these values were above the target of the central bank. This meant that even if the average wage share was lower than in the previous period, its decline stopped and it even increased at the end of the period. Fiscal policy was procyclical in four years, half of them contractionary. The average public investment-GDP ratio continued to increase. Lastly, on average the REER seemed relatively stable, but this masks that it increased until 2016, after which the Turkish lira suffered a sharp depreciation. In contrast, the ECI ranking consistently improved along the period. Also, even though the negative net exports and a current account deficit were maintained on average over the period, exports were more dynamic than imports, turning net exports positive towards the end of the period. Changes in the MPR contributed to autonomous exports playing a greater role in growth in the second period, in particular via the improvement of international non-price competitiveness. However, the MPR alone does not explain the change of regime. Despite the expansionary stance of monetary policy and neutral wage policies, the interruption of foreign capital stimuli due to the monetary policy change and the reversal of the global financial cycle, played a key role. This dampened the growth contributions of autonomous and induced domestic demand components, reducing imports and contributing to improved net exports.

5. Conclusions

In this paper, we focused on the analysis of growth drivers, the third level of demand and growth regime (DGR) and growth model (GM) analysis identified by Hein (2023b). In particular, we employed the concept of macroeconomic policy regimes (MPRs) to assess differences in macroeconomic trajectories of countries. To accomplish this, we drew on the results of Campana and Hein (2026), who applied the national income and financial accounting (NIFA) and the Sraffian supermultiplier (SSM) growth decomposition approaches to classify DGRs and identify the dominant components of autonomous demand in seven selected advanced and emerging economies: Germany, Spain, Argentina, Brazil, India, South Africa, and Turkey, during the periods 2000-2007 and 2011-2019, that is, before and after the Global Financial Crisis and the Great Recession. Although MPR analyses have been linked to the NIFA decomposition approach for several countries (Hein & Martschin, 2021; Ianni, 2024; Klassen, 2024; Kühnast, 2024), most of them advanced or from the European region, its link to the SSM growth decomposition has been much more limited, with only one study for Germany by Campana and Hein (2025). Therefore, the paper also contributes to the literature in post-Keynesian economics and comparative political economy by linking the MPR concept and the SSM decomposition approach to explain growth trajectories, while systematically extending the analysis to advanced and emerging countries with different regimes, structural underpinnings and macroeconomic policies, showing the explanatory power of this methodological framework.

By analysing monetary, wage, and fiscal policies, combined with open economy conditions, and their coordination and interaction, we argued that MPRs contributed not only to shaping the DGRs and the dominant autonomous sources of demand growth in each country, but also played a central role in explaining regime shifts between periods. In Germany, the shift in the MPR towards an expansionary stance of monetary and wage policies moderated the export-led nature of the German DGR, without fundamentally changing it. The considerable change in Spain's MPR, with a restrictive monetary policy stance and an accompanying deleveraging process, combined with an improvement of international price competitiveness, led to exports becoming the main autonomous source of demand growth. In Argentina, the MPR contributed to the recovery from the 2001-2002 crisis and to an increasing role for the public sector, but the change of regime was also strongly influenced by the exogenous deterioration of the open economy conditions and various economic and political crisis, which lead to economic stagnation compared to the previous export-led period. Initially, the Brazilian MPR supported domestic demand mainly through wage policies, but in the second period a change in fiscal policy towards a contractionary stance led to stagnantionary domestic demand and left exports as the main source of growth. In India, the MPR showed relative stability, which was reflected in the continuity of the DDL DGR and the dominant autonomous demand components. The MPR in South Africa in the first period was characterised by expansionary monetary policy and restrictive wage policy and shaped a DLPD regime, which then turned DDL as monetary and wage policies inverted their stances, and fiscal policy became expansionary. Lastly, while the MPR encouraged the inflow of foreign capital in Turkey, the global financial cycle dynamics had a key role in this too, enabling rapid growth after the 2001 crisis. However, this external stimulus later faded, reducing domestic demand, while exports became the main autonomous source of growth. The results of the MPR analysis offer useful insights into the dynamics of DGRs and GMs, but they need to be interpreted taking into account the different circumstances facing each country, both in economic and political-institutional terms. The results then allow for a direct link to the political economy dimension and the socio-institutional forces underlying the macroeconomic policies that shape them, thereby opening avenues for future research.

References

Ahmed, F., Binici, M., & Turunen, J. (2022). *Monetary policy communication and financial markets in India* (No. 209; Working Paper). International Monetary Fund. https://doi.org/10.5089/9798400224430.001

Akcay, Ü. (2018). The Turkish quagmire. *Catalyst*, *4*(1), 179–208.

Akcay, Ü. (2026). Political economy of Turkey's monetary policy experiment (2018–2023): Policy coalitions, monetary unorthodoxy and external constraints. *Journal of Balkan and Near Eastern Studies*, *0*(0), 1–27. https://doi.org/10.1080/19448953.2026.2633654

Akçay, Ü., & Güngen, A. R. (2022). Dependent financialisation and its crisis: The case of Turkey. *Cambridge Journal of Economics*, *46*(2), 293–316. https://doi.org/10.1093/cje/beac006

Akcay, Ü., Hein, E., & Jungmann, B. (2022). Financialisation and macroeconomic regimes in emerging capitalist countries before and after the Great Recession. *International Journal of Political Economy*, *51*(2), 77–100. https://doi.org/10.1080/08911916.2022.2078009

Akcay, Ü., Hein, E., Jungmann, B., & Woodgate, R. (2023). Editorial to the special issue: Frontiers in growth regimes research I: theoretical perspectives and conceptual issues. *European Journal of Economics and Economic Policies Intervention*, *20*(3), 406–409. https://doi.org/10.4337/ejeep.2023.0124

Akcay, Ü., Hein, E., Jungmann, B., & Woodgate, R. (2024). Editorial to the special issue: Frontiers in growth regimes research II: country cases. *European Journal of Economics and Economic Policies: Intervention*, *21*(1), 14–16. https://doi.org/10.4337/ejeep.2024.01.02

Allami, C., Bortz, P., & Cibils, A. (2021). From "downpour of investments" to debt crisis: The case of Argentina 2015–2019. In N. Levy-Orlik, J. A. Bustamante-Torres, & L.-P. Rochon (Eds), *Capital Movements and Corporate Dominance in Latin America*. Edward Elgar Publishing. https://www.e-elgar.com/shop/gbp/capital-movements-and-corporate-dominance-in-latin-america-9781800372139.html

Arestis, P. (2013). Economic theory and policy: A coherent post-Keynesian approach. *European Journal of Economics and Economic Policies: Intervention*, *10*(2), 243–255. https://doi.org/10.4337/ejeep.2013.02.08

Aschauer, D. A. (1989). Is public expenditure productive? *Journal of Monetary Economics*, *23*(2), 177–200. https://doi.org/10.1016/0304-3932(89)90047-0

Baccaro, L., Blyth, M., & Pontusson, J. (Eds). (2022). *Diminishing Returns: The New Politics of Growth and Stagnation* (1st edn). Oxford University PressNew York. https://doi.org/10.1093/oso/9780197607855.001.0001

Baccaro, L., & Pontusson, J. (2016). Rethinking comparative political economy: The growth model perspective. *Politics & Society*, *44*(2), 175–207. https://doi.org/10.1177/0032329216638053

Bahçe, S., Cömert, H., Nilgün, E., Karacimen, E., Köse, A. H., Orhangazi, Ö., Özgür, G., & Yalman, G. L. (2016). Financialisation and the financial crisis: The case of Turkey. In E. Hein, D. Detzer, & N. Dodig (Eds), *Financialisation and the Financial and Economic Crises: Country Studies*. Edward Elgar.

Bozkurt Gungen, S. (2024). Revisiting neoliberalism and new developmentalism: Lessons from Turkey and Argentina. *Third World Quarterly*, *45*(1), 189–207. https://doi.org/10.1080/01436597.2023.2251895

Campana, J. M., Emboava Vaz, J., Hein, E., & Jungmann, B. (2024). Demand and growth regimes of the BRICs countries – the national income and financial accounting decomposition approach and an autonomous demand-led growth perspective. *European Journal of Economics and Economic Policies: Intervention*, *21*(1), 17–41. https://doi.org/10.4337/ejeep.2023.0100

Campana, J. M., & Hein, E. (2025). Eurozone governance and the German demand and growth regimes, 1999–2024. *Review of Evolutionary Political Economy*, *6*(3), 515–545. https://doi.org/10.1007/s43253-025-00160-6

Campana, J. M., & Hein, E. (2026). *Demand-led growth decomposition and trade structures: Towards a spectrum of export-led models* (Working Paper No. 2604). Post-Keynesian Economics Society. https://postkeynesian.net/media/working-papers/PKWP2604.pdf

Carlin, W., & Soskice, D. (2015). *Macroeconomics: Institutions, Instability, and the Financial System*. Oxford University Press.

Carvalho, L. (2018). *Valsa Brasileira: Do Boom Ao Caos Econômico*. Editora Todavia S.A.

Carvalho, L., & Rugitsky, F. (2015). *Growth and distribution in Brazil the 21st century: Revisiting the wage-led versus profit-led debate* (Working Paper Nos 2015–25). Department of Economics - FEA/USP. https://repec.eae.fea.usp.br/documentos/Carvalho_Rugitsky_25WP.pdf

De Paula, L. F., Fritz, B., & Prates, D. (2017). Keynes at the periphery: Currency hierarchy and challenges for economic policy in emerging economies. *Journal of Post Keynesian Economics*, *40*(2), 183–202.

Detzer, D., Dodig, N., Evans, T., Hein, E., Herr, H., & Prante, F. J. (2017). *The German Financial System and the Financial and Economic Crisis* (Vol. 45). Springer International Publishing. https://doi.org/10.1007/978-3-319-56799-0

Detzer, D., & Hein, E. (2016a). Finance-dominated capitalism and its crisis in Germany: Deep recession and quick recovery – Germany as a role model? In A. Truger, E. Hein, M. Heine, & F. Hoffer (Eds), *Monetäre Makroökonomie, Arbeitsmärkte und Entwicklung/Monetary Macroeconomics, Labour Markets and Development, Festschrift für/for Hansjörg Herr*. Metropolis.

Detzer, D., & Hein, E. (2016b). Financialisation and the crisis in the export-led mercantilist German economy. In E. Hein, D. Detzer, & N. Dodig (Eds), *Financialisation and the Financial and Economic Crises: Country Studies*. Edward Elgar.

Dünhaupt, P., & Hein, E. (2019). Financialization, distribution, and macroeconomic regimes before and after the crisis: A post-Keynesian view on Denmark, Estonia, and Latvia. *Journal of Baltic Studies*, *50*(4), 435–465. https://doi.org/10.1080/01629778.2019.1680403

ECB. (2025). *European Central Bank, Key ECB Interest Rates* [Data set]. https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html

Etchemendy, S. (2019). The Rise of Segmented Neo-Corporatism in South America: Wage Coordination in Argentina and Uruguay (2005-2015). *Comparative Political Studies*, *52*(10), 1427–1465. https://doi.org/10.1177/0010414019830729

European Commission. (2019). *Türkiye Report 2019*. https://enlargement.ec.europa.eu/turkiye-report-2019_en

Feliciano, D., Ferreiro, J., & Rodriguez-Fuentes, C. J. (2025a). Exploring the relationship between growth regimes and growth drivers under finance-dominated capitalism: A study-case of European economies. *International Journal of Political Economy*, *54*(4), 453–488. https://doi.org/10.1080/08911916.2025.2586941

Feliciano, D., Ferreiro, J., & Rodriguez-Fuentes, C. J. (2025b). Growth regimes, growth drivers and private demand in financialised economies: The case of Spain. *Structural Change and Economic Dynamics*, *74*, 878–894. https://doi.org/10.1016/j.strueco.2025.06.005

Ferreiro, J., Galvez, C., & Gonzalez, A. (2016). Financialisation and the economic crisis in Spain. In E. Hein, D. Detzer, & N. Dodig (Eds), *Financialisation and the Financial and Economic Crises: Country Studies*. Edward Elgar.

Freitas, F. N. P., & Dweck, E. (2013). The pattern of economic growth of the Brazilian economy 1970–2005: A demand-led growth perspective. In E. S. Levrero, A. Palumbo, & A. Stirati (Eds), *Sraffa and the Reconstruction of Economic Theory: Volume Two* (pp. 158–191). Palgrave Macmillan UK. https://doi.org/10.1057/9781137319166_8

Fritz, B., De Paula, L. F., & Prates, D. M. (2018). Global currency hierarchy and national policy space: A framework for peripheral economies. *European Journal of Economics and Economic Policies: Intervention*, *15*(2), 208–218. https://doi.org/10.4337/ejeep.2018.02.11

Hall, P. A., & Soskice, D. (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press.

Haluska, G., Serrano, F., & Summa, R. (2026). The bridge to stagnation: Government expenditure cap, reforms and the fall in the business investment share in Brazil, 2015-2022. *Investigación Económica*, *85*(335), 142–169. https://doi.org/10.22201/fe.01851667p.2026.335.91755

Heimberger, P., & Kapeller, J. (2017). The performativity of potential output: Pro-cyclicality and path dependency in coordinating European fiscal policies. *Review of International Political Economy*, *24*(5), 904–928. https://doi.org/10.1080/09692290.2017.1363797

Hein, E. (2011). Redistribution, global imbalances and the financial and economic crisis. *International Journal of Labour Research*, *3*(1), 51–73.

Hein, E. (2012). *The Maroeconomics of Finance-dominated Capitalism – and Its Crisis*. Edward Elgar.

Hein, E. (2013). The crisis of finance-dominated capitalism in the euro area, deficiencies in the economic policy architecture, and deflationary stagnation policies. *Journal of Post Keynesian Economics*, *36*(2), 325–354. https://doi.org/10.2753/PKE0160-3477360207

Hein, E. (2014). *Distribution and Growth after Keynes: A Post-Keynesian Guide*. Edward Elgar.

Hein, E. (2023a). *Macroeconomics after Kalecki and Keynes: Post-Keynesian Foundations*. Edward Elgar.

Hein, E. (2023b). Varieties of demand and growth regimes – post-Keynesian foundations. *European Journal of Economics and Economic Policies Intervention*, *20*(3), 410–443. https://doi.org/10.4337/ejeep.2023.0103

Hein, E., & Martschin, J. (2020). The Eurozone in crisis—A Kaleckian macroeconomic regime and policy perspective. *Review of Political Economy*, *32*(4), 563–588. https://doi.org/10.1080/09538259.2020.1831202

Hein, E., & Martschin, J. (2021). Demand and growth regimes in finance-dominated capitalism and the role of the macroeconomic policy regime: A post-Keynesian comparative study on France, Germany, Italy and Spain before and after the Great Financial Crisis and the Great Recession. *Review of Evolutionary Political Economy*, *2*(3), 493–527. https://doi.org/10.1007/s43253-021-00044-5

Hein, E., & Stockhammer, E. (2010). Macroeconomic policy mix, employment and inflation in a post-Keynesian alternative to the new consensus model. *Review of Political Economy*, *22*(3), 317–354. https://doi.org/10.1080/09538259.2010.491283

Hein, E., & Truger, A. (2005). What ever happened to Germany? Is the decline of the former European key currency country caused by structural sclerosis or by macroeconomic mismanagement? *International Review of Applied Economics*, *19*(1), 3–28. https://doi.org/10.1080/0269217042000312588

Hein, E., & Truger, A. (2009). How to fight (or not to fight) a slowdown.pdf. *Challenge*, *52*(3), 52–75.

Hein, E., & Truger, A. (2012). Finance-dominated capitalism in crisis—The case for a global Keynesian New Deal. *Journal of Post Keynesian Economics*, *35*(2), 187–213. https://doi.org/10.2753/PKE0160-3477350202

Hein, E., & Vogel, L. (2008). Distribution and growth reconsidered: Empirical results for six OECD countries. *Cambridge Journal of Economics*, *32*(3), 479–511. https://doi.org/10.1093/cje/bem047

Herr, H., & Kazandziska, M. (2011). *Macroeconomic Policy Regimes in Western Industrial Countries*. Routledge.

Ianni, J. M. (2024). Macroeconomic policy regimes and demand and growth regimes in emerging market economies: The case of Argentina. *European Journal of Economics and Economic Policies: Intervention*, *21*(1), 90–112. https://doi.org/10.4337/ejeep.2023.0113

Jungmann, B. (2023). Growth drivers in emerging capitalist economies: Building blocks for a post-Keynesian analysis and an empirical exploration of the years before and after the Global Financial Crisis. *Review of Evolutionary Political Economy*, *4*(2), 349–386. https://doi.org/10.1007/s43253-023-00101-1

Kazandziska, M. (2019). *Macroeconomic Policy Regimes in Emerging Countries: The Case of Central Eastern Europe*. Metropolis.

Klassen, T. (2024). From export boom to private debt bubble: A macroeconomic policy regime assessment of Canada's shifting growth regime. *European Journal of Economics and Economic Policies: Intervention*, *21*(1), 73–89. https://doi.org/10.4337/ejeep.2023.0114

Kohler, K., & Stockhammer, E. (2022). Growing differently? Financial cycles, austerity, and competitiveness in growth models since the Global Financial Crisis. *Review of International Political Economy*, *29*(4), 1314–1341. https://doi.org/10.1080/09692290.2021.1899035

Kohler, K., Tippet, B., & Stockhammer, E. (2023). House price cycles, housing systems, and growth models. *European Journal of Economics and Economic Policies Intervention*, *20*(3), 461–490. https://doi.org/10.4337/ejeep.2023.0121

Kühnast, J. (2024). Growth regimes of populist governments: A comparative study on Hungary and Poland. *European Journal of Economics and Economic Policies: Intervention*, *21*(1), 133–150. https://doi.org/10.4337/ejeep.2023.0104

Naastepad, C. W. M., & Storm, S. (2007). OECD demand regimes (1960-2000). *Journal of Post Keynesian Economics*, *29*(2), 211–246. https://doi.org/10.2753/PKE0160-3477290203

Newman, S. (2014). *Financialisation and the Financial and Economic Crises: The Case of South Africa* (FESSUD Studies in Financial Systems No. 26). University of Leeds.

Newman, S. (2017). Financialisation and the financial and economic crisis: The case of South Africa. *New Agenda*, (65), 10–14.

OECD. (2017). *OECD Economic Surveys: South Africa 2017*. OECD Publishing. https://www.oecd.org/en/publications/oecd-economic-surveys-south-africa-2017_eco_surveys-zaf-2017-en.html

Onaran, Ö., & Galanis, G. (2014). Income distribution and growth: A global model. *Environment and Planning A: Economy and Space*, *46*(10), 2489–2513. https://doi.org/10.1068/a46265

Onaran, Ö., & Obst, T. (2016). Wage-led growth in the EU15 member-states: The effects of income distribution on growth, investment, trade balance and inflation. *Cambridge Journal of Economics*, *40*(6), 1517–1551. https://doi.org/10.1093/cje/bew009

Orhangazi, Ö., & Yeldan, A. E. (2023). Turkey in turbulence: Heterodoxy or a new chapter in neoliberal peripheral development? *Development and Change*, *54*(5), 1197–1225. https://doi.org/10.1111/dech.12792

Priewe, J., & Herr, H. (2005). *The Macroeconomics of Development and Poverty Reduction – Strategies Beyond the Washington Consensus*. Nomos.

Schedelik, M., Nölke, A., Mertens, D., & May, C. (2021). Comparative capitalism, growth models and emerging markets: The development of the field. *New Political Economy*, *26*(4), 514–526. https://doi.org/10.1080/13563467.2020.1807487

Serrano, F., & Summa, R. (2015). Aggregate demand and the slowdown of Brazilian economic growth in 2011-2014. *Nova Economia*, *25*, 803–833. https://doi.org/10.1590/0103-6351/3549

South African Reserve Bank. (2025). *Monetary Policy*. South African Reserve Bank. https://www.resbank.co.za/en/home/what-we-do/monetary-policy

Stockhammer, E. (2022). Post-Keynesian macroeconomic foundations for comparative political economy. *Politics & Society*, *50*(1), 156–187. https://doi.org/10.1177/00323292211006562

Stockhammer, E., & Kohler, K. (2022). Learning from distant cousins? Post-Keynesian economics, comparative political economy, and the growth models approach. *Review of Keynesian Economics*, *10*(2), 184–203.

Stockhammer, E., & Novas Otero, A. (2023). A tale of housing cycles and fiscal policy, not competitiveness. Growth drivers in Southern Europe. *New Political Economy*, *28*(3), 483–505. https://doi.org/10.1080/13563467.2022.2141702

Summa, R., & Serrano, F. (2018). Distribution and conflict inflation in Brazil under inflation targeting, 1999–2014. *Review of Radical Political Economics*, *50*(2), 349–369. https://doi.org/10.1177/0486613417691787

Summa, R., Teixeira, L., & Castilho, P. (2025). *Demand-led growth: Decompositions and its uses to explain growth experiences* (Discussion Paper No. 3173). Institute for Applied Economic Research (Ipea). https://repositorio.ipea.gov.br/server/api/core/bitstreams/a57ada28-1098-48fb-be91-65df08c47b64/content

Wood, J. D. G., & Stockhammer, E. (2024). Bringing household finance back in: House prices and the missing macroeconomics of comparative political economy. *Politics & Society*, *52*(3), 486–511. https://doi.org/10.1177/00323292231201480

Appendix A. Macroeconomic policy regime indicators: data definitions, notes and sources

Definition, unit	Notes	Data sources
Short-term (ST) real interest rate, %	Real short-term interest rates, based on instruments with maturities of less than one year, calculated with the GDP deflator (as in AMECO data) when only nominal rates available. Data for Argentina is based on the BADLAR rate, 30-35 days. Data available from 2001 for India and from 2002 for Turkey.	European Commission (2024), IMF (2025b), OECD (2025b), BCRA (2025), World Bank (2025)
Long-term (LT) real interest rate, %	Real long-term interest rates, based on long-term government debt. Data available from 2003 for Argentina, from 2001 for Brazil, and until 2018 for India.	European Commission (2024), IMF (2025c)
Real GDP growth, %, constant local currency	-	European Commission (2024), World Bank (2025)
Nominal unit labour costs, annual growth in %, national currency	Data for Argentina, Brazil, India and South Africa was calculated as the ratio between total nominal compensation to employees and real GDP. The time series for total compensation to employees were obtained from different sources depending on the country. Data available from 2001 for Brazil. Data available from 2005 for India.	European Commission (2024), OECD (2026a), World Bank (2025), CEPED (2022), INDEC (2026), MoSPI (2025)
Inflation rate, %, annual average	Data for Argentina for the years 2007–2016 comes from alternative sources due to the so-called intervention of the National Institute of Statistics and Censuses (INDEC) and the unreliability of inflation data during that period. We used the indices for San Luis, CABA, and GBA.	Eurostat (2025), IMF (2024), MECON (2026)
Adjusted wage share, % of GDP	Data available from 2004 for Argentina, Brazil, India and South Africa.	European Commission (2024), ILO (2026)
Cyclically adjusted budget balance (CBR), % of potential GDP, annual change in percentage points	Data available from 2002 for Brazil and from 2001 for South Africa.	European Commission (2024), IMF (2025a)
Output gap, % of potential GDP, annual change in percentage points	If unavailable, output gaps were calculated using a Hodrick-Prescott filter on real GDP data. The smoothing parameter was set to 100, and data for the period 1991-2023 was used to reduce potential end-point bias (Grigoli et al., 2015)	European Commission (2024), OECD (2026b), World Bank (2025)
Years with pro-cyclical fiscal policy	In pro-cyclical years, the cyclically adjusted budget balance and the output gap move in opposite directions. If the output gap increases and the CBR decreases (higher deficit or lower surplus), fiscal policy is pro-cyclical expansionary. If the output gap decreases and the CBR increases (lower deficit or higher surplus), fiscal policy is pro-cyclical contractionary.	European Commission (2024), IMF (2025a), OECD (2026b), World Bank (2025)

Public investment, % of GDP	Calculated by applying public sectoral investment share coefficients to real gross fixed capital formation data	OECD (2025a), European Commission (2024), World Bank (2025), MECON (2025), INDEC (2025), MoSPI (2025)
Real effective exchange rate, % change	ULC-based when available, CPI-based otherwise	Eurostat (2025), BIS (2025)
Economic complexity index (ECI) Trade	6 digits, HS96 (1998-2024)	OEC (2025)
Ranking ECI trade	6 digits, HS96 (1998-2024)	OEC (2025)
Real exports of goods and services, % of GDP	-	European Commission (2024), World Bank (2025)
Real imports of goods and services, % of GDP	-	European Commission (2024), World Bank (2025)

Sources: authors' presentation.

Detailed data sources

BCRA. (2025). *Interest rates* (Version accessed on 09/01/2025) [Dataset]. Central Bank of the Argentine Republic. https://www.bcra.gob.ar/en/interest-rates/

BIS. (2025). *Real effective exchange rates* (Version accessed on 09/01/2025) [Dataset]. Bank for International Settlements. https://data.bis.org/topics/EER

CEPED. (2022). *Ceped.data. Portal de difusión de datos* (Version accessed on 05/01/2026) [Database]. Centro de Estudios sobre Población, Empleo y Desarrollo (CEPED), Universidad de Buenos Aires (UBA). https://ceped-data.shinyapps.io/ceped-data/

European Commission. (2024). *Annual Macro-Economic (AMECO) database* (Version Autumn 2024 - update 15/11/2024, accessed on 09/01/2025) [Database]. https://economy-finance.ec.europa.eu/economic-research-and-databases/economic-databases/ameco-database_en

Eurostat. (2025). *Eurostat data browser* (Version accessed on 09/01/2025) [Database]. https://ec.europa.eu/eurostat/web/main/data/database

Grigoli, F., Herman, A., Swiston, A., & Di Bella, G. (2015). *Output gap uncertainty and real-time monetary policy* (Working Paper WP/15/14). International Monetary Fund. https://www.imf.org/external/pubs/ft/wp/2015/wp1514.pdf

ILO. (2026). *Labour income share as a percent of GDP (indicator)* (Version accessed on 05/01/2026) [Dataset]. International Labour Organization. https://rshiny.ilo.org/dataexplorer29/?lang=en&segment=indicator&id=LAP_2GDP_NOC_RT_A

IMF. (2024). *World Economic Outlook* (Version October 2024, accessed on 09/01/2025) [Database]. International Monetary Fund. https://data.imf.org/en/datasets/IMF.RES:WEO

IMF. (2025a). *Fiscal Monitor* (Version October 2025, accessed on 09/01/2026) [Database]. International Monetary Fund. https://www.imf.org/external/datamapper/datasets/FM

IMF. (2025b). *Monetary and Financial Statistics* (Version December 2025, accessed on 05/01/2026) [Database]. International Monetary Fund. https://www.imf.org/external/datamapper/rltir@FPP/USA/FRA/JPN/GBR/SWE/ESP/ITA/ZAF/IND/BRA

IMF. (2025c). *Public Finances in Modern History* (Version December 2025, accessed on 05/01/2026) [Database]. International Monetary Fund. https://www.imf.org/external/datamapper/rltir@FPP/USA/FRA/JPN/GBR/SWE/ESP/ITA/ZAF/IND/BRA

INDEC. (2025). *Formacion bruta de capital fijo del sector gobierno general. Serie 2004-2023* (Version accessed on 09/01/2025) [Dataset]. Instituto Nacional de Estadisticas y Censos. https://www.indec.gob.ar/indec/web/Nivel4-Tema-3-9-118

INDEC. (2026). *Cuenta de generación del ingreso (CGI)* (Version accessed on 05/01/2026) [Database]. Instituto Nacional de Estadisticas y Censos. https://www.indec.gob.ar/indec/web/Nivel4-Tema-3-9-49

MECON. (2025). *Formación bruta de capital fijo por gran sector a precios constantes* (Version accessed on 09/01/2025) [Dataset]. Ministerio de Economia. https://datos.produccion.gob.ar/dataset/formacion-bruta-de-capital-fijo-por-sector-y-rama-de-produccion/archivo/e5f04523-88dd-4d9d-9d6a-aed83f87ce93

MECON. (2026). *Portal de datos económicos* (Version accessed on 05/01/2026) [Database]. Ministerio de Economia. https://www.economia.gob.ar/datos/

MoSPI. (2025). *National Accounts Statistics* (Version accessed on 09/01/2025) [Dataset]. Ministry of Statistics and Programme Implementation. https://www.mospi.gov.in/publications-reports

OEC. (2025). *Economic Complexity Index (ECI)—Trade* (Version accessed on 03/07/2025) [Dataset]. Observatory of Economic Complexity. https://oec.world/en/rankings/eci/hs6/hs96?tab=ranking

OECD. (2025a). *Investment by sector (indicator)* (Version accessed on 09/01/2025) [Dataset]. Organisation for Economic Co-operation and Development. https://www.oecd.org/en/data/indicators/investment-by-sector.html

OECD. (2025b). *OECD Economic Outlook* (Version accessed on 09/01/2025) [Database]. Organisation for Economic Co-operation and Development. https://data-explorer.oecd.org/

OECD. (2026a). *Annual GDP and components—Income approach* (Version accessed on 09/01/2026) [Dataset]. Organisation for Economic Co-operation and Development. https://data-explorer.oecd.org/

OECD. (2026b). *Output gap (indicator)* (Version accessed on 09/01/2026) [Dataset]. Organisation for Economic Co-operation and Development. https://data-explorer.oecd.org/

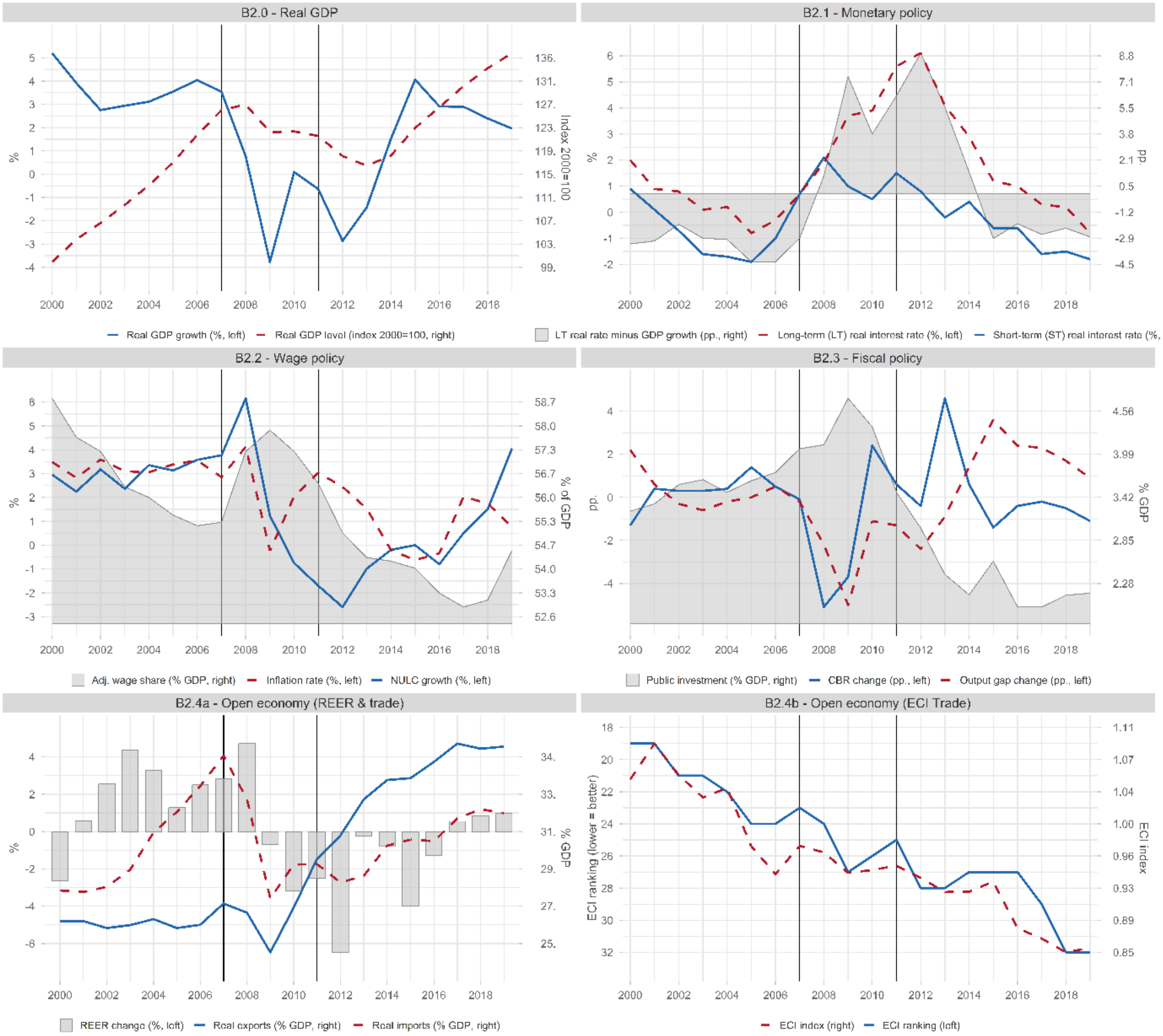
World Bank. (2025). *World Development Indicators* (Version accessed on 09/01/2025) [Database]. https://databank.worldbank.org/source/world-development-indicators

Appendix B. Macroeconomic policy regime indicators: figures

B1 — Germany

Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

B2 — Spain

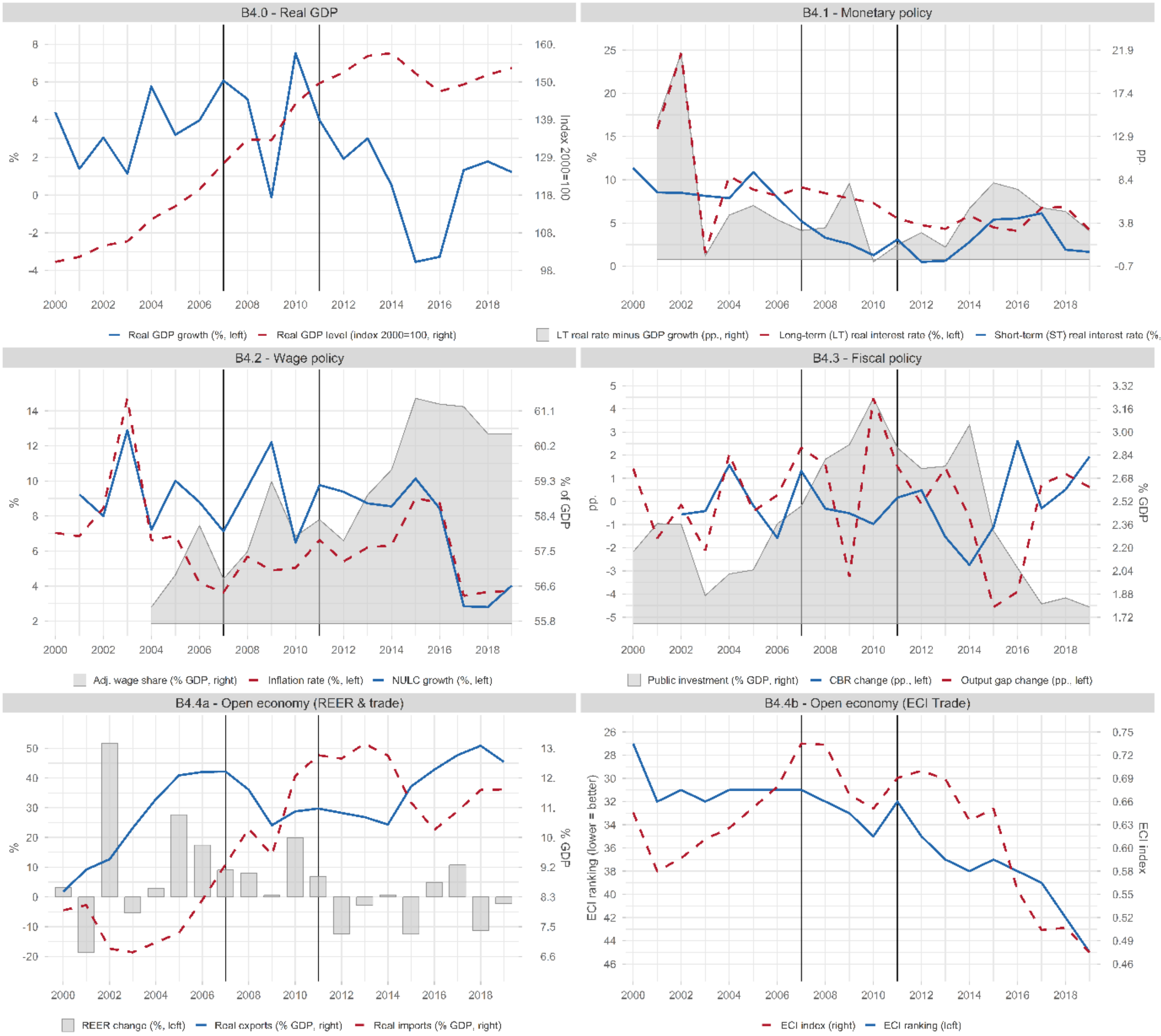


Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

B3 — Argentina

Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

B4 — Brazil



Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

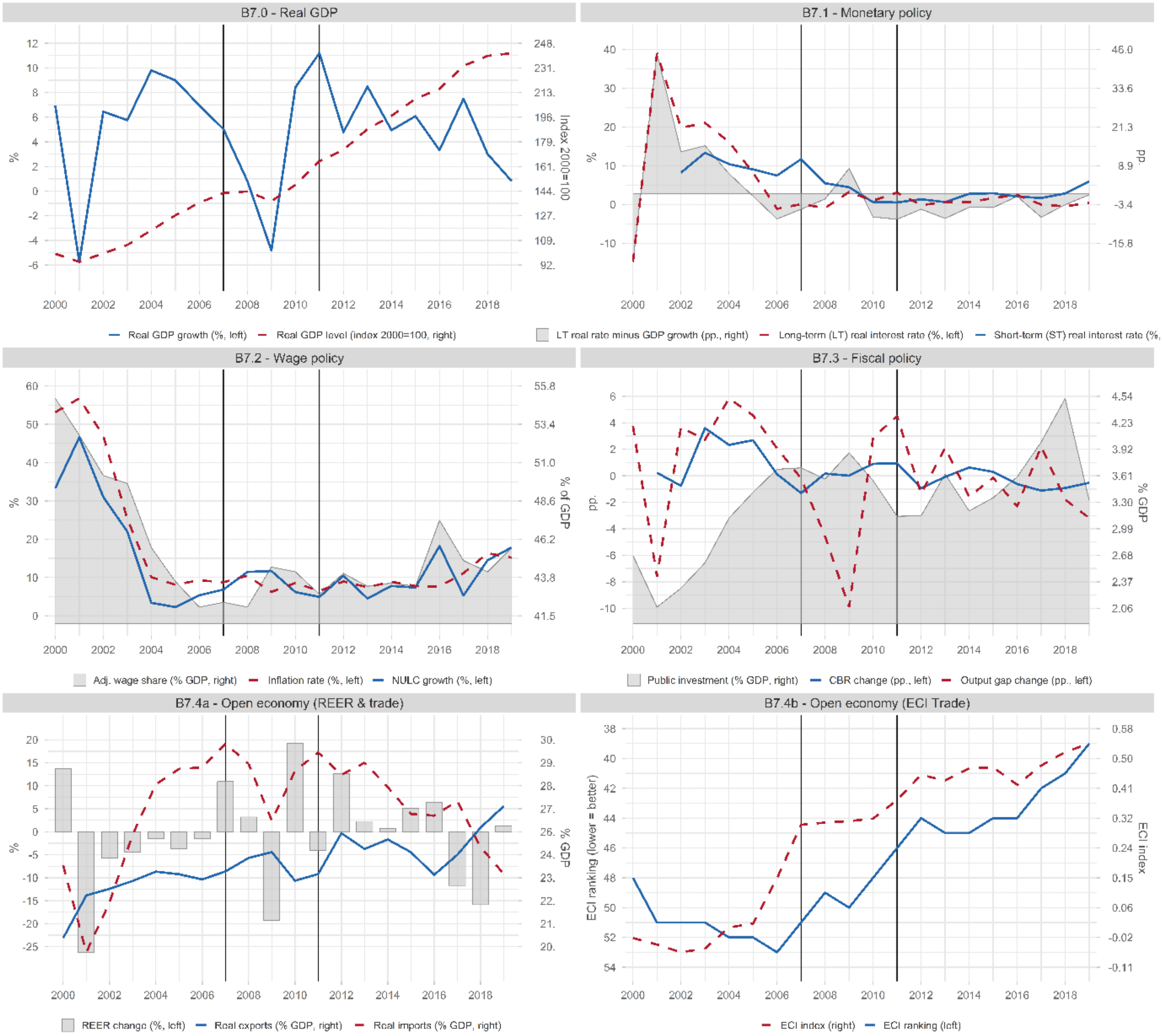
B5 — India

Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

B6 — South Africa

Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.

B7 — Turkey



Note: 'pp' indicates percentage points. See Appendix A for definitions, sources and specific notes for each variable regarding construction and availability.