International Journal of Political Economy

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/mijp20

Alternative Views on Portuguese Stagnation: From the Euro's Inception to the COVID-19 Pandemic

Diogo Martins & Ricardo Paes Mamede

To cite this article: Diogo Martins & Ricardo Paes Mamede (2022) Alternative Views on Portuguese Stagnation: From the Euro's Inception to the COVID-19 Pandemic, International Journal of Political Economy, 51:1, 49-64, DOI: 10.1080/08911916.2022.2046345

To link to this article: https://doi.org/10.1080/08911916.2022.2046345

Published online: 06 May 2022.

INTERNATIONAL JOURNAL OF POLITICAL ECONOMY
2022, VOL. 51, NO. 1, 49–64
https://doi.org/10.1080/08911916.2022.2046345

Alternative Views on Portuguese Stagnation: From the Euro's Inception to the COVID-19 Pandemic

Diogo Martins[a] and Ricardo Paes Mamede[b]

[a]Department of Economics, University of Massachusetts, Amherst, Massachusetts, USA; [b]Department of Political Economy of Iscte, University Institute of Lisbon, Lisbon, Portugal

ABSTRACT

Over the past two decades, real GDP per capita in Portugal has nearly stagnated. The conventional account attributes this to the mismanagement of public finances and the lack of structural reforms in labor and product markets prior to the "adjustment program" agreed with the troika in the early 2010s. In the same vein, the neoclassical-inspired interpretation explains the subsequent recovery based on supply-side and fiscal reforms implemented during the troika years, which would account for the reduced fiscal deficits, external equilibrium and employment growth registered in the pre-COVID-19 period. In this article, we challenge this optimistic view, identifying structural weaknesses of the Portuguese economy that would have soon become apparent even if the pandemic had not happened. Addressing these weaknesses requires changes that go beyond the EU and national responses to the pandemic crisis.

KEYWORDS

COVID-19 crisis; Euro crisis; Portugal; structural change

JEL CLASSIFICATIONS

E12; E13; E24; F32; F62

Introduction

Portugal has been presented as a success story of the EU strategy in dealing with the Southern European external debt crisis of 2010–2012. After a period of severe austerity, the country managed to gradually revert budget cuts and increase the minimum wage, while employment was quickly growing. This achievement is particularly remarkable since it was compatible with external equilibrium and a reduced budget deficit. These developments are often presented as evidence that it is possible to pursue gradual development policies in Southern Europe within the constraints of the Eurozone political economy, at least in the absence of exceptional negative shocks.

In this article, we challenge the optimistic reading on the Portuguese process of economic recovery in the post euro-crisis years. Although the economic and social relief in this period was real, productivity and real wages nearly stagnated. If the pandemic crisis had not hit the Portuguese economy, its growth model would soon have faced its own contradictions. We argue that the sustainability of the recovery recorded until 2019 depends on deep structural dynamics that include the upgrading of the specialization profile, macroeconomic stability, and economic equality.

Our discussion builds on the contemporary debate on structural change and long-term growth (see section "Framing the Debate"), in which two contrasting views can be identified. On the one hand, the perspective focusing on the supply-side determinants of growth and structural reforms was implicit in the logic of the "adjustment program" negotiated in 2011 with the troika (IMF, ECB, and European Commission). Here the sectoral specialization of the economy is seen as an

CONTACT Diogo Martins dmartins@umass.edu Department of Economics, University of Massachusetts-Amherst, Gordon Hall 418 N Pleasant Street, Amherst, MA 01002, USA.

outcome of market dynamics, and the flexibility of labor and product markets as essential for an efficient allocation of resources and investment. An alternative view emphasizes the role of demand in long-run growth, recognizes the differences in the productivity growth potential across sectors, and the perils of letting markets mechanisms alone determine the specialization profile of the country.

Our interpretation of the evolution of the Portuguese economy fits into the latter literature. However, we highlight the specificity of the Portuguese case, arguing that the current international debate has no direct translation to the Portuguese context.

In section "The Case of Portugal" we analyze the pattern of Portuguese economic growth in three periods: before the financial crisis, during the "adjustment program", and in the years preceding the pandemic crisis. We argue that the evolution of the Portuguese economy during these periods is structurally determined by the characteristics of Portuguese integration in the Eurozone, together with a few strong exogenous shocks. Domestic economic reforms did not play a decisive role in these developments. The growth pattern in the years before the pandemic – which combined employment expansion with external equilibrium – was only possible because of depressed real wages, which are explained by high labor slack in the previous period and the (externally-driven) strong growth of tourism. If the pandemic shock had not hit the Portuguese economy, this growth pattern would have soon shown to be unsustainable, since pressure to increase wages coupled with stagnant productivity would mean the loss of price competitiveness and an increase in imports, and, consequently, the return to external imbalances.

We conclude that the Portuguese economy's ability to preserve its internal and external balance depends on economic instruments that the country no longer controls, namely monetary and exchange rate instruments. We briefly discuss the reforms that would be necessary on a European and domestic scale to face short-run crises and to promote an effective strategy of structural transformation that promotes long-term sustainable growth.

Framing the Debate

This section contrasts the stylized features of two interpretations of the long-term growth process: the neoclassical and the post-Keynesian/structuralist views. This comparison does not ignore the heterogeneity that exists within each of these traditions, nor the existence of academic work that lies on the borderline between them. However, such stylized contrast is useful to understand the evolution of the Portuguese economy in recent decades and the public policy options that have shaped these outcomes.

Our review of the debate will focus on the determinants of long-run growth and productivity, with emphasis on the role of structural change, capital inflows/external savings, real exchange rates and the balance of payments. We argue that the dismal prospects of productivity growth in the Portuguese economy have deep structural roots, resulting from policy errors that derive from a misconception of the long-run growth process rooted in neoclassical-inspired institutions and ideas.

The Stylized Features of the Neoclassical Model

A Supply-Driven Economy

In the long run, the economy is entirely driven by supply-side determinants. Capitalism is described as a harmonious system moving along a stable trend with full employment of capital and labor. In Solow's (1956) model, the seminal contribution of neoclassical theory to growth analysis, movement along this trend is imposed by theoretical construction. Inherited from the micro foundation revolution, more recent contributions within the neoclassical tradition, placed in the so-called New Keynesian school, reach the same macroeconomic implications, but with

more sophisticated assumptions and techniques (Mankiw, 1989; Mankiw and Romer, 1991). In the end, the conclusion is the same: the long run is taken as synonymous for the moment when all rigidities cease to exist; without such rigidities, the forces of equilibrium can move the economy to its trend path; hence, by construction, there is no role for demand policy in the long run.

The Ultimate Sources of Growth in the Long Run: An Exogenous Residual or Supply-Determined Endogeneity

One of the central conclusions of the Solow model is that the accumulation of factors of production (capital and labor) cannot be a source of sustained economic growth. Following the neoclassical tradition, labor and capital are assumed to be subject to diminishing returns. Within a production function with constant returns to scale, this implies that mature capitalist economies converge to a steady state. Once this position is reached, the natural growth rate of the economy is exclusively determined by labor productivity and labor force growth rates. In the Solow model none of these determinants are resolved internally: they are exogenous. In an ad hoc reasoning, total factor productivity is attributed to a more efficient resource mix, attributed to organizational and technological improvements. The model does not offer any direct conclusion on how the latter's growth should be promoted. However, the need for structural reforms in labor and product markets is a common public policy prescription inspired by these models to stimulate total factor productivity growth.

An early attempt to overcome the limitations of Solow's model came from the development of Human Capital theory. With Becker (1962) as the seminal reference, this line of research remains very influential to this day with numerous extensions. Its main theoretical implication is that the value of the balanced growth path can be explained by the accumulation of education and skills by the labor force. Therefore, human capital accumulation should be promoted. This model is implicit in several public policy prescriptions. On the one hand, it has been used as a theoretical basis for strengthening education and training systems in the context of development strategies. But it is also used as a justification for liberalization and low tax rates, relying on the conception that the latter are essential to promote incentives for human capital accumulation in the early stages of life.

Later, the exogeneity of the growth rate and productivity was challenged by the emergence of endogenous growth models. The inclusion of R&D in neoclassical models was part of the new growth theory revolution (Romer 1990; Aghion et al. 1998). The main idea behind these models is that knowledge can be produced, and its production can be subject to increasing returns to scale. In such a situation, economies can improve their long-run growth if they increase the share of resources allocated to R&D activities. Growth is endogenous only in the sense that the growth rate is determined internally by the state variables in the model. A crucial feature of these models is that an efficient allocation of resources cannot be realized by competitive markets because knowledge is a non-rival good. The incentive for firms to allocate resources to R&D depends on the existence of well-defined property rights. Having a well-developed legal system that guarantees property rights is seen as an essential condition for promoting innovation and long-term growth.

Growth May Be Industry-Specific, but It is Invariant at the Industry Level

As mentioned above, neoclassical endogenous growth models recognize the possibility of increasing productivity by mobilizing resources for R&D activities. But the development of these activities is often considered to be independent of the sectoral composition of the economy. In other words, structural change at the sectoral level does not interfere with the probability of existence of R&D activities or the probability of the knowledge produced in these activities being applied in the economy.

The Allocation of Investment is Determined by Technology

Unlike other traditions, investment is not seen here as a fundamental dynamic source of capitalism. Savings determine investment, in accordance with the assumption of full employment. Their remuneration is technologically determined and is given by the marginal productivity of capital. The discussion typically focuses on the interpersonal choice between consumption and savings and how that choice does or does not ensure a level of capital formation that maximizes consumption in the long run.

Fiscal Policy is Neutral or Harmful to Growth

Assuming full employment and the invariance of labor productivity to aggregate demand, fiscal policy can have no positive effect on growth in the long run. Fiscal policy is growth-neutral or growth-negative as there are no possible multiplier effects, therefore it must be financed by taxes that cause a decrease in private consumption and/or private savings.

Comparative Advantage is a Static Concept

The neoclassical system accepted the Ricardian notion of static comparative advantage but adapted its foundations to its own theoretical assumptions and technical apparatus. In the Heckscher-Ohlin model, the basic neoclassical model for international trade, comparative advantage depends on the relative abundance of factor endowments that are given exogenously (Gandolfo 2014, ch.2). Together with declining marginal returns on factors of production, price and wage flexibility ensures that each country specializes in the good (or continuum of goods) for which it has comparative advantage. International trade may generate winners and losers within countries, but the overall gains are at least as good as in the case of autarky. Policies aimed at changing the pattern of comparative advantage are seen as ineffective and undesirable.

Balance of Payments and Real Exchange Rate Are Not Important for Long-Run Growth

Most of the aforementioned models assume a closed economy framework. Regarding open economies and the role of the balance of payments in economic growth, neoclassical models make a clear distinction between two types of imbalances (Ocampo, Rada, and Taylor 2009). The first is the twin deficit hypothesis. This imbalance is caused by the public decision to run a government deficit. Taken as implicit in the typical assumption of full employment, additional demand must be met through additional imports, causing a trade deficit. Therefore, government deficits are seen as the source of external imbalances and instability. Contractionary fiscal policy should be pursued to restore the trade balance and macroeconomic stability.

The second source of imbalances is the lending behavior of domestic private agents. Here the trade imbalance occurs when the private sector attracts foreign capital from abroad and domestic savings become lower than private investment. Unlike the previous case, this process is led by private agents, based on their own risk assessment under free market conditions with capital mobility between countries. This type of imbalance is seen as natural and beneficial for the growth process: on the one hand, private agents in more capital-intensive countries have an incentive to lend to less capital-intensive countries, taking advantage of the higher marginal productivity of capital and profitability in the latter countries; on the other hand, capital funds from abroad allow recipient economies to accelerate capital accumulation and thus their convergence process. It is assumed that countries will use the revenues from faster economic growth to repay debt commitments and the balance of payments will converge to a neutral position as the capital intensity of countries approaches.

The Alternative Interpretation

Investment is Essential for Understanding Capitalist Dynamics and Technical Progress

Contrary to the conventional view, investment cannot be attributed to technological parameters or to adjustment trajectories for optimal stocks computed by intertemporally maximizing agents. Because capital accumulation is the variable that links the present to an uncertain future and the return to investment depends on the power relations that shape capitalism, its behavior is taken as highly volatile and difficult to predict.

Different heterodox traditions have emphasized different determinants of investment, although most of them are not mutually exclusive. Keynesian economists have focused on the role of expectations in investment decisions made in a fundamentally uncertain world, both in a static environment and in a dynamic setting (Davidson 2011). Neo-Kaleckian (Marglin and Bhaduri 1991) and neo-Harrodian authors (Skott 1989) integrate the role of power relations embedded in bargaining over income shares, taking into account real and labor market dynamics. Despite the differences and debates between them, all these traditions share a vision of the political economy of investment in which power relations and uncertainty play a central role.

Investment is also a key variable to sustain demand-driven technical progress within the framework of the so-called Kaldor-Verdoorn law. The idea that technological progress is fundamentally a capitalist phenomenon whose materialization depends on demand conditions is a cornerstone of the early post-Keynesians' attempt to extend Keynesian economics in the long run (Kaldor 1957; Robinson, 1956).

The Sectoral Composition of the Economy Matters for Long-Term Growth

As Tregenna (2015) notes, post-Keynesian/structuralist interpretations of development favor a sector-specific analysis of the contributions of structural change. In particular, the structuralist (e.g., Hirschman, Nurkse and Rosenstein-Rodan) and Post-Keynesian (e.g., Nicholas Kaldor) traditions emphasize the central role of manufacturing for economic growth. The characteristics that make manufacturing so special are (Blankenburg, Palma, and Tregenna, 2008): dynamic returns to scale, the exceptional opportunities of learning by doing and propensity to absorb technological progress, strong backward and forward linkages with other sectors of the economy, and the tradable property of most of its products, expanding the limits of internal growth that is compatible with external equilibrium. This does not necessarily lead to a defense of the increasing share of manufacturing in GDP. It is a stylized fact that the share of manufacturing in total output follows an inverted U-shape as GDP per capita increases over time (e.g., Palma, 2014). It is usual for mature economies to experience a reduction in the share of manufacturing output at advanced stages of their development trajectory. Thus, the development prescription is not to avoid de-industrialization, but to avoid a negative pattern of de-industrialization (see Rowthorn and Wells 1987, on the concepts of positive and negative de-industrialization).

Comparative Advantage is a Dynamic Process and is Influenced by State-Led Policy

As the development experiences of several South Asian countries show (Wade 1989; Amsden 1989; Öniş, 1991), state-led planning and the explicit targeting and protection of certain industries and activities may play a decisive role in catching-up processes. At the theoretical level, this revival of industrial policy was based on the rejection of static comparative advantage as a source of growth. Comparative advantage as presented by the Heckscher-Ohlin model may be a useful tool for solving problems of optimal resource allocation in the short run, but it ignores a central part of the growth process: the generation of technological capabilities (Andreoni and Chang 2016). In the former, it is the relative quantity of factor endowments that determines comparative advantage. Within certain limits, however, the accumulation of technological capabilities can

change the pattern of comparative advantage that a static analysis based on factor endowments would have determined (Lin and Chang 2009). Therefore, the relevant notion is the concept of dynamic comparative advantage. A country can acquire a comparative advantage in a particular sector if that sector is able to accumulate technological capabilities and organizational knowledge over a long period. The government should provide strategic planning support in identifying sectors with the greatest potential, providing them with favorable conditions, such as access to finance and trade protection, to the point where these sectors can compete in international markets (Andreoni and Chang 2019). It should also invest in fundamental technological knowledge that can be incorporated into the production processes and which would not otherwise occur, given the conditions of high uncertainty intrinsic to this type of investment (Mazzucato 2011).

The Balance of Payments and the Real Exchange Rate Are Important for Long-Run Growth

An explicit formalization of the importance of balance of payments for long-term growth was proposed by Thirlwall in the late 1970s in what became known as the Balance-of-Payments Constraint Growth Model (Thirlwall 1979). According to this model, external demand and the income elasticity of exports and imports play a central role in the growth process. An economy seeking to sustain a long-term growth process should, firstly, favor economic integration characterized by high levels of external demand and, secondly, implement an economic diversification strategy aimed at increasing the income elasticity of exports and decreasing the income elasticity of imports. This has become central to open economy theories of economic growth and has given rise to several theoretical developments and empirical analysis (for an overview, see Soukiazis and Cerqueira 2012 and Thirlwall 2019).

The empirical validity of the Balance-of-Payments Growth Models and the Keynesian valuation of output over exchange rate adjustments as a means of achieving external equilibrium have led many heterodox economists to downplay the role of price competitiveness and real exchange rates (RER) on long-run growth over a long period of time (Razmi 2016). This position has changed over the past two decades as a result of prolific research showing the detrimental effects of RER overvaluation on long-term growth, especially for low- and middle-income economies (Rodrik 2008; Blecker 2016; Rapetti, Skott, and Razmi 2012).

An overvalued RER can have detrimental effects on growth through direct and indirect channels that undermine economic diversification and capital accumulation and hence the future growth rate consistent with external balance.

The direct channel of RER on economic diversification is associated with price competitiveness. A higher RER implies that several tradable goods that would otherwise be competitive on international markets become uncompetitive. These goods start being imported and their domestic production either scales down or ceases to exist altogether. Given the increasing returns to scale, the learning by doing effects and the time needed to acquire technological capabilities, a real exchange rate overvaluation may block the possibility of a technologically backward economy to specialize in tradable goods, some of them being technologically advanced. Since more technologically sophisticated goods are associated with a higher income elasticity of demand (Dosi, Pavitt, and Soete 1990), this means that a temporary overvaluation of the real exchange rate may have persistent effects on the long-term growth rate through regressive structural change effects with a negative effect on the balance-of-payments constrained growth rate (for an empirical assessment, see Cimoli, Porcile, and Rovira 2010).

The indirect channel concerns the negative effect of an overvalued RER on the profitability of the tradable sector and the consequent negative effects on investment. At an early stage, an overvalued RER affects the profitability of the tradable sector through its impact on capacity utilization. As domestic tradable goods become less competitive in international markets, capacity utilization falls, if not permanently, at least until the capital stock adjusts. Second, it affects the profit share: the expansion of the non-tradable sector leads to the increase of labor demand and

wages, putting pressure on wages in the tradable sector as well (assuming there is labor mobility between them). For a given growth rate of average labor productivity, this will cause a fall in the profit share of the tradable sector (Bresser-Pereira, Oreiro, and Marconi 2014).

Unregulated Capital Flows May Have a Detrimental Effect on Long-Term Growth

One of the most important sources of real exchange rate overvaluation is the inflow of foreign capital. Capital flows have other characteristics that are less beneficial than conventional theory predicts. In particular, they are subject to the volatility of expectations in international financial markets, following a pattern close to that described by Minsky in his destabilizing stability hypothesis (Minsky 1982): they flow massively into peripheral economies during times of stability, but tend to disappear suddenly when expectations revert. Recipient economies become vulnerable to severe sudden stops and capital reversals, as documented by a growing empirical literature (Cavallo, Eichengreen, and Panizza 2018), raising skepticism regarding the benefits of foreign savings for development. Faced with a sudden financial and/or exchange rate crisis, countries often have to rely on internal devaluation processes that destroy or slow down previous development efforts. The balance of payments thus exerts strong cyclical shocks through trade and external finance (Ocampo, 2016).

The Case of Portugal

Productivity and economic growth in the long run are always the combined result of exogenous factors (i.e., that cannot be changed by policy decisions) and the conscious action of policy makers.

In small open economies, as in the case of Portugal, external exogenous events are very important. These types of economies rely heavily on the international trade of goods and services, whose major determinants, such as the expansion of international income and international prices, they are unable to influence. To a large extent, the same applies to international capital flows, which are only partly determined by domestic decisions (other than the political choice to open the capital account).

Although exogenous shocks have played a key role in the evolution of the Portuguese economy in recent decades, some political decisions have overdetermined economic outcomes, either directly or indirectly, amplifying the effect of exogenous shocks. This overdetermination does not refer mainly to current government choices over the years, but to structural decisions taken at specific moments, which made subsequent government decisions secondary. The most decisive policy choice for the Portuguese economy was joining the Eurozone in 1999. First, because once that decision was taken the Portuguese economy was exposed to a set of inevitable macroeconomic developments. Secondly, and more importantly, because it placed the Portuguese economy under the influence of institutions, such as the European Commission and the European Central Bank, which reinforced a hegemonic development strategy of neoclassical inspiration.

In the following sections, we summarize the main developments of the Portuguese economy in three periods: from the euro inception to the international crisis of 2008; the austerity phase (2010–2014); and years preceding the COVID pandemic (2014–2019). In each case, we point out the features of neoclassical thinking that shaped policy options and discuss how these were detrimental to long-run productivity growth.

Pre-Crisis (1999–2008)

In the first decade after Portugal joined the single European currency, the euro experienced a sharp appreciation against the dollar and other currencies (from 1€ = 1.18$USD in January 1999

to 1€ = 1.60$USD in April 2008). Although real wages grew in line with labor productivity, the nominal exchange rate appreciation implied a strong increase of the real exchange rate with serious impacts on the price competitiveness of the tradable sector, contributing to a persistently high current account deficit (–9.4% of GDP, annual average). During this period, the external imbalance was financed through capital inflows from Northern European institutional investors, namely banks and investment funds, who seemed to believe that the risk of default within the Eurozone was minimal. These funds were used to finance the Portuguese economy through loans to national banks and the purchase of Portuguese sovereign bonds. Given the unfavorable conditions created by the real exchange rate, most of these capital inflows were allocated to non-tradable sectors, reinforcing the current account imbalance (Mamede, Godinho, and Simões 2014; Barradas et al. 2018).

Hence, the allocation of funds to the non-tradable sector and the consequent external imbalance should not be interpreted as the result of a decision of private and public agents in a neutral economic environment, but as events structurally determined by two effects of the decision to join the Eurozone: the strong appreciation of the real exchange rate and the perception of credit risks associated with belonging to a single currency. The joint effect of these two features has been called a euro-resource curse (Mamede, 2020), being interpreted as a special case of finance-led Dutch disease (Botta 2015).

The unfavorable economic environment for tradable goods, combined with the increased competitive pressure from Asian and Eastern European emerging economies, has led to a strong deindustrialization in Portugal, both in terms of employment and value added (Rodrigues, Santos, and Teles 2016; Barradas et al. 2018). The sharp fall in demand for domestic tradable goods had a profound impact on aggregate investment. Following the collapse of investment in the real estate sector, private investment declined, putting additional downward pressure on demand. As a result, the unemployment rate started an upward trend, from 4.4% in 1999 to 7.6% in 2008. This caused an endogenous pressure on the fiscal deficit, resulting from the action of automatic stabilizers. However, government consumption was insufficient to compensate for the negative shock to other demand components. The limits imposed by the EU's Stability and Growth Pact (3% of GDP to the budget deficit and 60% to the debt stock) resulted in fiscal policies that were unable to restore full employment.

Note that the strong deindustrialization in this period cannot be seen as a mere secular trend, associated with the relative decline in industrial production as GDP per capita grows. The share of manufacturing in value added fell rapidly (from 17.9% in 1999 to 13.7% in 2008) in a period of dismal real GDP growth (1.3% on average). In other words, Portugal experienced in this period a premature deindustrialization process, with negative consequences for productivity and long-term growth (as we discuss in the following section).

The authorities have sought to overcome the lack of competitiveness through programs to support technology and business innovation (Mamede et al., 2016). In theory, this would make the domestic economy more competitive, decreasing its dependence on the price competitiveness of low value-added exports and shifting to more sophisticated exports with a low-price elasticity of demand. According to this view, this strategy would soon make the Portuguese real exchange rate an almost irrelevant variable for the Portuguese external balance. However, such a strategy is time incoherent: the problems created by the currency appreciation were immediate and their resolution was urgent, while the technological upgrading strategy, if successful, could only produce effects in the medium to long term.

Thus, we can identify several of the neoclassical misconceptions about the development process in this period: the negligible role of real exchange rates; the benefits of liberalized capital flows and private sector-led current account deficits; and the notion that economic structure is irrelevant to the absorption of technological progress. All these misconceptions contributed to

placing the Portuguese economy in an unfavorable political economy context, the effects of which prevail to this day.

The Austerity Phase (2010–2013)

In 2009, as a result of the financial crisis that hit the world economy the previous year, the financial sector's perception of the risk of the sovereign debt of the peripheral European countries suddenly changed. The pressure on sovereign interest rates quickly spread to several countries, including Portugal. At the time, the ECB and the Eurozone members refused to take any decision that represented a systemic and effective response to the problem, such as a massive purchase program of sovereign debt in secondary markets or a joint debt issue. As a result, Portugal initiated successive austerity packages in the belief that they would be able to restore the confidence of financial investors. Although the ruling government assumed a public narrative of great confidence in the success of this strategy, it was seen as implausible from the outset.

As a consequence of the ineffectiveness of that strategy, in 2011 Portugal was led to sign an agreement with the Troika (IMF, ECB and European Commission) aiming at an official loan of 78.6 billion euros conditional on the acceptance of a package of austerity policies. This package was designed based on an internal devaluation strategy, whose main objective was to mimic a traditional IMF monetary devaluation strategy in the context of a monetary union (along lines that had been, years earlier, proposed by Blanchard 2007). In addition to financing a decapitalized banking sector, the program aimed to correct the external and fiscal imbalances of the Portuguese economy and implement a set of labor and product markets reforms to stimulate long-term growth.

The troika program was presented as a short-term recessionary shock with medium- and long-term gains. A central component of the program was the implementation of a severe pro-cyclical fiscal policy. This would have a direct effect on fiscal consolidation and an indirect effect on resolving the external imbalance, in line with the neoclassical interpretation of the twin deficits (see section "Framing the Debate"). Unemployment would rise in the short run as an intended result of the program. Together with direct cuts in civil servants' wages, this would help limit nominal wage growth in the Portuguese economy, achieving the central objective of lowering unit labor costs (ULCs). Once this goal had been achieved, the Portuguese economy should converge toward external balance through three mechanisms: an increase in exports, due to more competitive prices; a decrease in imports, through the contraction of disposable income; and an increase in direct foreign investment, which would be attracted by the greater profitability associated with lower wages and a more "business-friendly" legal environment. Following the same line of argument, aggregate investment should recover quickly. Not only because of direct investment from abroad, but also because of the beneficial effects for greater profitability and institutional environment in the country.

The results of the program were, however, very different, both on the macroeconomic stabilization and the long-term growth objectives. First, the effects of the contractionary shock on GDP and unemployment were much more severe than initially expected. Second, the objective of controlling the fiscal deficit was not achieved in the period. Despite intense cuts in public expenditure and fiscal transfers, the contraction in incomes ultimately had a detrimental effect on public finances. Third, external balance was achieved, but as a primary result of the severe contractionary shock in imports, with exports following a path in line with pre-program years and FDI making a modest contribution.

The long-term effects of the program are also not in line with the original objectives. According to the original idea, macroeconomic policy would imply some short-term detrimental effects on GDP, unemployment, and wages, but these negative effects would soon be offset by positive effects in the long run. However, the procyclical contractionary shock deepened the

country's development problems through two main channels: the collapse of private investment and a sharp increase in emigration.

As in the pre-crisis period, private investment went through a period of contraction. But this time the effect was much more severe. These developments in investment can be directly explained by the effects that the internal devaluation had on capacity utilization and, consequently, on the incentive to invest. This reveals the self-defeating strategy associated with austerity. Note that the objective of squeezing ULCs has succeeded as a result of the impact of high unemployment and changes in labor law on workers' bargaining power. In practice, this meant that productivity increased faster than real wages, leading to a higher profit share. However, this increase was more than offset by the capacity utilization component, pushing the total profit rate down and contributing to the fall in aggregate investment. In addition, investment was also negatively influenced by financing costs and credit constraints during this period, resulting from the restructuring of the banking sector and the banks' strong risk aversion in a context of high uncertainty.

Another key characteristic of this period was the sharp increase in emigration. It is estimated that between 2011 and 2014 more than 150,000 people (i.e., 1.5% of the population) left the country, most of them to find a job abroad. This shows that stimulating human capital formation is not a sufficient condition for growth. Although Portugal has made remarkable progress in improving the academic qualification of its labor force, this effort cannot produce the expected effects if these workers leave the country. Knowing that migration processes are typically difficult to reverse in the short term, we can assume that the migration wave during the austerity period was an event with negative long-term effects.

As in the pre-crisis period, we can identify several neoclassical misconceptions that guided the Troika program and the economic policies implemented in this period. The belief that liberalization reforms are the most effective policy instrument to promote long-run growth and that contractionary fiscal shocks have no persistent effects led to the failure to foresee their detrimental long-run effects, namely through the impact on investment and the skill loss associated with long-term unemployment and mass emigration. This was due, respectively, to the view that investment is primarily determined by supply-side determinants (with capacity utilization playing a secondary role) and that unemployment is primarily a problem of insufficient labor market flexibility, which contributed to the misconception that the unemployment effects of fiscal consolidation would be quickly reversed. Similarly, the belief that fiscal consolidations can be achieved through cuts in public spending ignored the possibility that the resulting contraction in aggregate demand would more than offset the fiscal contraction, leading to an increase in the fiscal deficit and public debt. Finally, the idea that fiscal consolidation is the main channel to end external imbalances, according to the twin-deficits hypothesis, did not apply: external balance was achieved mainly through the domestic devaluation effects on private consumption and investment, while the fiscal deficit as a percentage of GDP actually increased.

3.3. Post-Crisis Period (2014–2019)

The Portuguese economic recovery from the period of austerity began after 2013, when the downward trajectory of GDP and upward trajectory of unemployment were reversed. Strong disagreements remain on two central questions: (i) what were the causes of this recovery? and (ii) would this recovery be sustainable in the long term, had the pandemic not ended it? We take these questions in turn.

3.3.1. The Causes of Recovery

The Portuguese economic recovery should be understood as the reflection of a virtuous triangle of three essentially exogenous events: the change in the monetary policy stance of the ECB, the

blocking of several austerity measures by the Portuguese Constitutional Court and the expansion of external demand for tourism and real estate activities (in Portugal and elsewhere).

The ECB's reversal of monetary policy – hinted in Mario Draghi's famous speech in 2012 and implemented vigorously from 2015 onwards – was the most important determinant of the Portuguese recovery. The ECB's asset purchases and the consequent decrease in funding costs made the imminent collapse of the Eurozone unlikely and allowed Portugal to return to market funding. Although macroeconomic imbalances have not been resolved, the new monetary stance has eliminated a significant part of the fundamental medium-term uncertainty surrounding the Portuguese economy, with positive impacts on investment and private consumption.

The Portuguese Constitutional Court's veto of several austerity measures in 2012 and 2013 was another exogenous shock. These decisions prevented further cuts in civil servants' wages, retirement pensions and unemployment benefits, imposing the reversal of some measures already implemented. The reversal of these austerity measures was an important signal that it would be difficult to implement additional deflationary policies and prevented a further contraction in public spending, helping to halt the deflationary spiral and improve expectations.

The third striking event of this period concerns the strong growth of external demand for tourism services and real estate. These developments stem mainly from exogenous factors, such as the international expansion of low-cost airlines and the persistent political turbulence in North African countries since the Arab Spring, as well as the strong availability of liquidity at the international level. The real estate boom was also fueled by national policy decisions, such as the Golden Visa program (which encourages the acquisition of real estate by foreign citizens) and the liberalization of rental laws.

3.3.2. The Conditions for Sustainable Recovery

The post-austerity economic recovery can be summarized in four main stylized facts: gradual internal and external balance; reconciling fiscal consolidation with progressive policies; weak real wage and productivity growth; and an increase in the share of sectors with below-average productivity and wages (see Table 1).

The conventional interpretation assumes an optimistic view of the post-2013 recovery process. The Portuguese economy is seen as one of the successful cases of the implementation of the Troika program during the euro crisis. A central message of this interpretation is the existence of a causal link between the agenda of labor and product markets liberalization, applied during the period of austerity, and the dynamism of employment and exports during the recovery period. In this view, austerity and liberalizing reforms were socially painful but necessary to ensure balanced growth in the future. While the stagnation of productivity and wages is a source of concern, advocates of the hegemonic view do not associate damaging productivity developments with the

Table 1. Main features of the Portuguese crisis and recovery.

	2008	2013	2019
Real GDP (2008 = 100)	100	92	105
Unemployment rate	7.6%	16.2%	6.5%
Current account balance (% of GDP)	–11.8%	1.6%	0.4%
Fiscal balance (% of GDP)	–3.7%	–5.1%	0.1%
Public health expenditure (2008 = 100)	100	85	107
Monthly minimum wage (2008 = 100)	100	114	141
Real average monthly salary (2008 = 100)	100	101	107
Real labor productivity per hour worked (2008 = 100)	100	107	108
Share of low-tech manufacturing in total VA	6.5%	6.7%	7.0% [a]
Share of accommodation, restaurants, and support services in total VA	8.0%	8.2%	10.4%

Sources: National Statistical Institute; Bank of Portugal; Eurostat.
[a]2018 figures.

structural change that has occurred in recent years. Nor do they see any fundamental incompatibility between sectoral developments in the Portuguese economy and its long-term stability.

The structuralist interpretation we propose here departs from the conventional perspective on three fundamental points.

First, we argue that there is a direct link between the structural change observed in the Portuguese economy during the recovery period and the continued stagnation of productivity and wages. This idea is related to the notion of a dual economy and its effects in the long-run productivity growth and inequality. Storm (2017) discusses the problem of economic dualization in a large mature economy as the United States. In summary, he argues that technological advancement in dynamic sectors is creating a massive movement of workers into stagnant sectors, which play the role of employers of last resort. This movement, coupled with an already weak bargaining position of workers in stagnant sectors, creates a dual labor market in which workers in stagnant sectors do not enjoy the productivity gains generated in the economy as a whole. Moreover, the growing importance of stagnant sectors in total employment and output creates static and dynamic negative pressures on the growth rate of average labor productivity: the static effect emerges directly from the higher share of sectors with below average productivity in the total employment structure; the dynamic effect stems from the fact that activities with a higher productivity growth potential lose weight in total output, causing a decline in the contribution of these sectors to productivity developments over time.

The Portuguese economy went through a similar experience, but with some notable differences, which derive from its status as a semi-peripheral open economy. The common feature is the growing importance of stagnant sectors in total employment and output. This process has both short- and long-term negative effects on the evolution of average productivity and wages through the same channels explained above. But there is a fundamental difference with the US case. In the US, according to Storm (2017), it was productivity growth in dynamic sectors that created the excess labor that underpinned the expansion of stagnating sectors. Therefore, the problem was not so much the current productivity developments, but how these productivity gains would be reflected asymmetrically in wages in different sectors and how the expansion of stagnant activities could have a negative impact on productivity growth in the future. In the Portuguese case, the source of abundant labor supply was not technological/supply-side. Rather, it was the result of a protracted negative demand shock before and during the period of austerity.

The Portuguese process of structural change has two characteristics that make it more damaging to long-term growth than in the US case. The first is that, as we have seen, it was not caused by strong productivity gains in dynamic sectors. Thus, the Portuguese economy, in addition to being subject to negative secular pressure due to the higher share of stagnant sectors, did not experience the positive effects of large productivity gains in recent decades. The second is the existence of high unemployment for several years, which favors the negative effects of hysteresis, with negative consequences for long-run growth. This is different from the American case, where the transfer of workers between sectors was much smoother most of the time.

The structuralist view also invites us to consider the long-term implications of the Portuguese growth model during the post-austerity recovery period. In this period, the combination of an increase in national income with a balanced current account was only possible due to the stagnation of wages, caused both by the negative effect of persistently high (even if decreasing) unemployment rates on the bargaining power of workers and by the increase in the weight of sectors with below-average wages. Even if the pandemic crisis had not occurred, it would be very difficult to maintain this model, since growing labor shortages would create upward pressure on wages, whose effect on imports would hardly be offset by exports.

Finally, the structuralist interpretation emphasizes the vulnerability of this growth model to sudden shocks in the international economy. This has become evident with the emergence of the pandemic crisis, in which countries with greater dependence on sectors that rely on the

international mobility of people (such as the tourism sector) have exhibited more severe declines in their output and are experiencing lower growth rates of economic activity.

In addition, compared to more balanced export-led strategies, a tourism-centered strategy has the distinctive feature of increasing the costs for other economic activities through its effects on renting and real estate prices, and absorbs a large share of the labor force. Both of these characteristics increase the risk of excessive specialization, creating difficulties for the emergence of new economic sectors and increasing the likelihood of sectoral bottlenecks.

Conclusions

Between the start of the euro in 1999 and the eve of the COVID-19 pandemic 20 years later, real GDP per capita in Portugal grew at a dismal average rate of 0.8 per cent per year. The conventional account of Portuguese economic stagnation over the last two decades attributes it to the mismanagement of public finances and the lack of structural reforms in labor and product markets prior to the "adjustment program" agreed with the troika in the early 2010s. In the same vein, the neoclassical-inspired interpretation of the Portuguese growth path explains the subsequent recovery based on supply-side and fiscal reforms implemented during the troika years. As a corollary, the performance of the Portuguese economy in the post-pandemic world is seen as depending on the country's willingness to pursue these reforms and, possibly, on continued investments in general education and R&D. Taken together, these policy measures should be sufficient to ensure a growth path compatible with internal and external macroeconomic equilibrium, at least in the long run.

This conventional view ignores several developments that should be considered when explaining the Portuguese growth performance in recent decades. In this article, we draw on structuralist and post-Keynesian perspectives to emphasize the importance of capital flows, exchange rate developments and contractionary fiscal policies, and how these interact with the prevailing specialization profile and external competitiveness pressures, leading to recurrent macroeconomic imbalances and modest growth in the long run. According to this view, Portugal's high current account deficits until the early 2010s are mainly the consequence of a real exchange rate appreciation induced by massive foreign capital inflows and the sharp nominal appreciation of the euro in the previous decade. An overvalued real exchange rate, in a context marked by increased exposure to competition from emerging economies, led to deindustrialization and low investment in the tradable goods sector. This, in turn, undermines long-term growth both by slowing capital accumulation and by reducing the aggregate impact of activities that are characterized by higher productivity growth potential.

According to this view, the post-austerity recovery in Portugal can hardly be attributed to the supply-side and fiscal reforms implemented in the Troika years. The demand stimulus associated with expansionary monetary policy, the reversal of many austerity measures by the Portuguese government and the international tourism boom of the 2010s played a decisive role, leading to the expansion of employment and the reduction of budget deficits up to 2019. This recovery was compatible with a balanced current account given the slow growth of real wages and historically low levels of investment (both of which contributed to limiting import growth), as well as the strong increase in tourism revenues. However, this growth path is not sustainable. During the pre-pandemic years, the abundant supply of low-skilled labor was mostly absorbed by activities with low and stagnant productivity. Together with a long period of underinvestment in productive capacities, this translated into a nearly unchanged aggregate productivity.

The increased reliance on tourism-related services has left Portugal particularly vulnerable to the COVID-19 pandemic. In 2020, Portuguese GDP fell by 8.4%, the seventh worst performance in the EU in a list headed by other economies where tourism plays a central role (Spain, Italy, Greece, Croatia, France, and Malta). In the post-COVID-19 period, Portugal may benefit from

tourism returning to pre-pandemic levels and growth. This, however, will not guarantee the sustainability of enduring high growth rates nor the absence of external imbalances, for two main reasons. First, as we have seen, this growth pattern tends to be associated with low levels of productivity growth. Second, as labor slack falls, average wages grow faster. These two trends would soon translate into higher imports and lower price competitiveness, putting the external accounts under strain.

To promote a balanced growth path, Portugal needs to upgrade its specialization profile toward more sophisticated exports, reduce the sensitivity of imports to domestic demand growth, limit the amount of undesirable capital flows and manage the allocation of capital away from less productive, non-tradable activities. This is easier said than done in the context of the European Economic and Monetary Union, in which most policy instruments are not available to national governments and are not supplemented by the supranational policies that are needed to address production asymmetries across the EU. Ignoring the relevance of these structural asymmetries or the inability of conventional policy prescriptions to address them will not prevent future crises within the Eurozone, nor will it improve the long-term prospects for balanced growth in countries like Portugal.

A detailed study of the policy reforms needed at the European level and their likelihood of implementation given existing policy constraints is beyond the scope of this article. However, it is worth briefly setting out the reasons why the current European response to the COVID-19 crisis is not sufficient to address the problems of Portuguese macroeconomic integration.

A consequent macroeconomic reform would imply three necessary conditions. First, a solution to the private and public macroeconomic imbalances: it is not feasible to design a development strategy while maintaining the current size of Portuguese public and private debt; any change in the monetary stance of the ECB and/or a future moment of turbulence in the international financial markets may trigger a spike in the cost of debt rollover or a sudden crisis that jeopardizes the course of development. Second, a permanent mechanism to correct asymmetric shocks and overvalued exchange rates: without an exchange rate policy, countries with weaker productive structures are unable to use this instrument to deal with the asymmetric external shocks that periodically hit these economies; an internal transfer mechanism is needed to avoid unnecessary periods of deflation. Finally, a large-scale public investment program directed at the peripheral countries: such a program should not only aim to compensate for the large divergence in public investment between North and South in recent decades, but also directly promote technology transfer between the two regions.

The NextGenerationEU, launched by the European Commission as part of the EU response to the COVID crisis, does not meet any of the conditions listed above. First, the program is rather limited in duration (2022–2026). Second, the size of the program is far from sufficient to offset the negative effects of European integration and austerity over the past two decades.[1] To give an idea, the amount of the recovery and resilience plan covers only about 55% of the cumulative loss of public investment over the period 2009–2019, if the 2009 level were to remain constant. According to the projections of the Bank of Portugal, potential GDP will annually increase by no more than 0.2% by 2026 as a result of the program. Finally, in addition to being short-lived and underfunded, the European response has no mechanisms to deal with existing macroeconomic imbalances or to respond to future asymmetric shocks, keeping the Portuguese economy vulnerable in the near future.

It should not be concluded from this that the European response is undesirable or totally ineffective. A European response that includes an investment program financed by European social bonds is certainly better for the European periphery than an additional period of austerity.

[1]The most important component of the program is the recovery and resilience plan financed through the issuance of social bonds issued by the European Commission. For Portugal, it amounts to €13.9 billion in grants and €2.7 billion in loans.

Although not large, the positive effects of the program will be felt in the Portuguese economy, especially after several years of shrinking public investment.

However, viewing the Next Generation EU as a turning point in European integration and as a sufficient condition for the weaknesses of the Portuguese economy is misleading. The conditions necessary for the success of Portuguese macroeconomic integration lie beyond the current European response.

Notes on contributors

Diogo Martins (dmartins@umass.edu) is PhD student at the Department of Economics of the University of Massachusetts Amherst, MA, USA.

Ricardo Paes Mamede (ricardo.mamede@iscte.pt) is Associate Professor at the Department of Political Economy of Iscte – University Institute of Lisbon, and Integrated Researcher at DINÂMIA'CET-Iscte, Center for Socioeconomic and Territorial Studies.

For helpful comments on earlier drafts, the authors are most grateful to two anonymous referees.

References

Aghion, Philippe, Peter W. Howitt, Maxine Brant-Collett, and Cecilia García-Peñalosa. 1998. *Endogenous Growth Theory*. Cambridge, MA: MIT Press.

Amsden, Alice Hoffenberg. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. Oxford: Oxford University Press.

Andreoni, Antonio, and Ha-Joon Chang. 2016. "Industrial Policy and the Future of Manufacturing." *Economia e Politica Industriale* 43 (4):491–502. doi:10.1007/s40812-016-0057-2.

Andreoni, Antonio, and Ha-Joon Chang. 2019. "The Political Economy of Industrial Policy: Structural Interdependencies, Policy Alignment and Conflict Management." *Structural Change and Economic Dynamics* 48: 136–50. doi:10.1016/j.strueco.2018.10.007.

Barradas, Ricardo, Sérgio Lagoa, Emanuel Leão, and Ricardo Paes Mamede. 2018. "Financialization in the European Periphery and the Sovereign Debt Crisis: The Portuguese Case." *Journal of Economic Issues* 52 (4): 1056–83. doi:10.1080/00213624.2018.1527589.

Becker, Garry S. 1962. "Investment in Human Capital: A Theoretical Analysis." *Journal of Political Economy* 70 (5, Part 2):9–49. doi:10.1086/258724.

Blankenburg, S., Palma, J.G., and Tregenna, F. 2008. "Structuralism". *The New Palgrave Dictionary of Economics* 8: 69–74.

Blanchard, O. 2007. "Adjustment Within the Euro. The Difficult Case of Portugal." *Portuguese Economic Journal* 6 (1): 1–21.

Blecker, Robert A. 2016. "The Debate over 'Thirlwall's Law': Balance-of-Payments-Constrained Growth Reconsidered." *European Journal of Economics and Economic Policies: Intervention* 13 (3):275–90. doi:10.4337/ejeep.2016.03.03.

Botta, A. 2015. *The Macroeconomics of a Financial Dutch Disease*. Levy Economics Institute of Bard College Working Paper (850).

Bresser-Pereira, Luiz Carlos, José Luis Oreiro, and Nelson Marconi. 2014. *Developmental Macroeconomics: New Developmentalism as a Growth Strategy*. London: Routledge.

Cavallo, Eduardo, Barry Eichengreen, and Ugo Panizza. 2018. "Can Countries Rely on Foreign Saving for Investment and Economic Development?" *Review of World Economics* 154 (2):277–306. doi:10.1007/s10290-017-0301-5.

Cimoli, Mario, Gabriel Porcile, and Sebastián Rovira. 2010. "Structural Change and the BOP-Constraint: Why Did Latin America Fail to Converge?" *Cambridge Journal of Economics* 34 (2):389–411. doi:10.1093/cje/ben060.

Davidson, Paul. 2011. *Post Keynesian Macroeconomic Theory (Second Edition)*. Cheltenham, UK: Edward Elgar Publishing.

Dosi, Giovanni, Keith Pavitt, and Luc Soete. 1990. *The Economics of Technical Change and International Trade*. Brighton: Wheatsheaf.

Gandolfo, Giancarlo. 2014. "Introduction to International Trade Theory and Policy." In *International Trade Theory and Policy*, edited by Giancarlo Gandolfo, 3–7. Berlin, Heidelberg: Springer.

Kaldor, Nicholas. 1957. "A Model of Economic Growth." *The Economic Journal* 67 (268):591–624. doi:10.2307/2227704.

Lin, Justin, and Ha-Joon Chang. 2009. "Should Industrial Policy in Developing Countries Conform to Comparative Advantage or Defy It? A Debate between Justin Lin and Ha-Joon Chang." *Development Policy Review* 27 (5): 483–502. doi:10.1111/j.1467-7679.2009.00456.x.

Mamede, Ricardo Paes, Manuel Mira Godinho, and Vítor Corado Simões. 2014. "Assessment and Challenges of Industrial Policies in Portugal: Is There a Way out of the 'Stuck in the Middle' Trap?." In *Structural Change, Competitiveness and Industrial Policy: Painful Lessons from the European Periphery*, edited by Aurora Teixeira, Ester Silva, and Ricardo Paes Mamede, 258–77. London: Routledge.

Mamede, Ricardo Paes. 2020. "Financialisation and Structural Change in Portugal: A Euro-Resource-Curse?" *In Financialisation in the European Periphery: Work and Social Reproduction in Portugal*, edited by Ana Cordeiro Santos, and Nuno Teles, 64–81. London: Routledge.

Mankiw, N. Gregory, and David Romer. 1991. *New Keynesian Economics-Vol. 1: Imperfect Competition and Sticky Prices*, Vol. 1. Cambridge, Massachusetts: MIT Press.

Mankiw, N. Gregory. 1989. "Real Business Cycles: A New Keynesian Perspective." *Journal of Economic Perspectives* 3 (3):79–90. doi:10.1257/jep.3.3.79.

Marglin, Stephen A., and Amit Bhaduri. 1991. "Profit Squeeze and Keynesian Theory." In *Nicholas Kaldor and Mainstream Economics: Confrontation or Convergence?* edited by Edward J. Nell, and Willi Semmler, 123–63. London: Palgrave Macmillan.

Mazzucato, Mariana. 2011. "The Entrepreneurial State." *Soundings* 49 (49):131–42. doi:10.3898/136266211798411183.

Minsky, Hyman. 1982. "The Financial Instability Hypothesis: Capitalist Processes and the Behavior of the Economy." In *Financial Crises: Theory, History and Policy*, edited by Charles Kindleberger and Jean-Pierre Laffargue, 13–39. Cambridge: Cambridge University Press.

Ocampo, José Antonio, Codrina Rada, and Lance Taylor. 2009. *Growth and Policy in Developing Countries*. New York: Columbia University Press.

Ocampo, José Antonio. 2016. "Balance-of-Payments Dominance: Implications for Macroeconomic Policy." In *Macroeconomics and Development: Roberto Frenkel and the Economies of Latin America*, edited by Mario Damill, Martin Rapetti and Guillermo Rozenwurcel, 211–28. New York: Columbia University Press.

Öniş, Ziya. 1991. "The Logic of the Developmental State." *Comparative Politics* 24 (1):109–26.

Palma, José Gabriel. 2014. "De-Industrialisation, 'Premature' De-Industrialisation and the Dutch Disease." *Revista NECAT-Revista do Núcleo de Estudos de Economia Catarinense* 3 (5):7–23.

Rapetti, Martin, Peter Skott, and Arslan Razmi. 2012. "The Real Exchange Rate and Economic Growth: Are Developing Countries Different?" *International Review of Applied Economics* 26 (6):735–53. doi:10.1080/02692171.2012.686483.

Razmi, Arslan. 2016. "Correctly Analysing the Balance-of-Payments Constraint on Growth." *Cambridge Journal of Economics* 40 (6):1581–608. doi:10.1093/cje/bev069.

Rodrigues, João, Ana C. Santos, and Nuno Teles. 2016. "Semi-Peripheral Financialisation: The Case of Portugal." *Review of International Political Economy* 23 (3):480–510. doi:10.1080/09692290.2016.1143381.

Rodrik, Dani. 2008. "The Real Exchange Rate and Economic Growth." *Brookings Papers on Economic Activity* 2008 (2):365–412.

Romer, Paul M. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98 (5, Part 2):S71–S102. doi:10.1086/261725.

Rowthorn, Robert, and John R. Wells. 1987. *De-Industrialization and Foreign Trade*. Cambridge: Cambridge University Press.

Skott, Peter. 1989. "Effective Demand, Class Struggle and Cyclical Growth." *International Economic Review* 30 (1): 231–47. doi:10.2307/2526560.

Solow, Robert M. 1956. "A Contribution to the Theory of Economic Growth." *The Quarterly Journal of Economics* 70 (1):65–94. doi:10.2307/1884513.

Soukiazis, Elias, and Pedro André Cerqueira, eds. 2012. *Models of Balance of Payments Constrained Growth: History, Theory and Empirical Evidence*. London: Palgrave Macmillan.

Storm, Servaas. 2017. "The New Normal: Demand, Secular Stagnation, and the Vanishing Middle Class." *International Journal of Political Economy* 46 (4):169–210. doi:10.1080/08911916.2017.1407742.

Thirlwall, Anthony P. 1979. "The Balance of Payments Constraint as an Explanation of International Growth Rate Differences." *BNL Quarterly Review* 32 (28):45–53.

Thirlwall, Anthony P. 2019. "Thoughts on Balance-of-Payments-Constrained Growth after 40 Years." *Review of Keynesian Economics* 7 (4):554–67. doi:10.4337/roke.2019.04.09.

Tregenna, Fiona. 2015. *Deindustrialisation, Structural Change and Sustainable Economic Growth*. MERIT Working Papers 032, United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT).

Wade, Robert. 1989. "What Can Economics Learn from East Asian Success?" *The Annals of the American Academy of Political and Social Science* 505 (1):68–79. doi:10.1177/000271629505001006.