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Anemic economic growth in advanced economies: structural factors and the impotence of expansionary macroeconomic policies

Luigi Bonatti*

ABSTRACT: This paper assesses the role of some structural factors in determining the current anemic growth of the advanced economies, especially focusing on Southern Europe. It discusses what macroeconomic policies can do for reviving growth and illustrates some hypotheses: policy makers’ attempts to push GDP growth above its sustainable long-term rate through expansionary policies, excessive leverage and rising private and public debt generate instability and imbalances; economic fundamentals and easy credit push up the price of residential land and urban rents, thus crowding out investment in productive assets and depressing long-run growth; supporting asset prices, central banks may end up exacerbating the causes making growth anemic; Summers’ secular stagnation and its policy implications do not appear very plausible; the persistency of wide competitiveness imbalances among different areas determines an unequal spatial distribution of high value-added activities, which collides with the worldwide tendency towards the equalization of workers’ education levels and aspirations.

KEYWORDS: Secular stagnation, competitiveness, global imbalances, Sovereign debt crisis.

JEL CLASSIFICATION: E60, E65, F01, F43, O40.

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1. Introduction

This paper intends to illustrate the reasons of the current anemic economic growth in the advanced economies, with a special focus on the Eurozone and Italy. This discussion aims at assessing the role of some structural factors in causing this slowdown and what macroeconomic policies can do for reviving growth. The objective is to outline a general and coherent interpretation of different but related phenomena, even at the cost of glossing over—at a stage that is still preliminary to reach firm conclusions—the data and formal analyses that support it.

The paper sets forth and discusses a series of hypotheses:

1) In the presence of structural factors that have determined the declining growth trend characterizing the advanced economies since the 1970s, the policy makers have repeatedly tried to push GDP growth above its (falling) sustainable long-term rate through expansionary (or ultra-expansionary) macroeconomic policies, excessive leverage and rising levels of private and public debt. This has ended up generating instability and imbalances, thus often leading to crises and recessions.

2) Economic fundamentals and easy credit have pushed up the price of residential land and urban rents, thus squeezing profits and wages: beside widening wealth and income inequality, this tends to crowd out investment in productive assets and depress long run growth.

3) The support guaranteed by the monetary authorities to the prices of financial assets (the so-called “central bank Put”) avoids massive defaults but crowds out investment in productive assets, since it raises the expected rate of return that the latter have to offer in order to match the rate of return that financial assets are expected to offer thanks to the central banks’ interventions. This hypothesis can be restated by claiming that by supporting asset prices and maintaining the illusion of solvency, central banks exacerbate the causes that make economic growth anemic and lead to a dangerous decoupling of asset prices from their underlying economic fundamentals.

4) The capacity of monetary policy to revive economic growth is constrained by its inability to push nominal interest rates below zero. In turn, this inability causes a lack of aggregate demand, which is at the origin of the growth slowdown experienced by the rich economies. These propositions are the
core of Summers’ secular stagnation hypothesis and will be criticized in the light of some alternative hypotheses, in particular of Robert Gordon’s thesis that sluggish productivity improvements due to the slower pace of technological progress are the real cause of today’s anemic growth.

5) The tendency of the competitiveness imbalances among countries and regions to be wide and persistent (also because of the growing importance of agglomeration economies) determines an unequal spatial distribution of the high value-added activities (i.e., those activities that can generate “good jobs”), which collides with the tendency towards an equalization of the workers’ education levels and aspirations that is underway worldwide and in particular in the rich world. As a result, in the advanced economies, underutilized human resources are concentrated in poorly competitive areas. Hence, if the structural features that entrench these competitiveness imbalances and constrain the growth potential of these low-competitive areas are not removed, expansionary fiscal policies boosting their local demand cannot but feeding their external deficits.

In each of the subsequent sections of the paper, one of the hypotheses outlined above will be examined, following the same order whereby they were presented above. A final section contains some conclusions.

2. A brief outline of some significant episodes of the last 35 years

After “Les Trente Glorieuses”—the three decades following the Second World War in which Western Europe, the U.S. and Japan grew at an unprecedented pace—the growth potential of the advanced economies was weakened by a series of structural factors that included demographic transition with consequent ageing of the population, exhaustion of the productivity gains due to the secular shift away from agriculture towards industry and deceleration of productivity growth due to the shift away from manufacturing towards services, exhaustion for the other advanced economies of potential productivity gains from catching up to American technology, faltering technological progress. As a result, advanced economies have experienced a decline in GDP and labor productivity growth over the last four decades (see Figure 1). These long-run trends appear quite pronounced
including the post 2007 period, but are evident even by ending the sample at the eve of the global financial crisis.¹

Inverting these trends, or at least trying to dampen them, would have required to act on those “fundamentals” that determine the sustainable long-term rate of GDP growth, thus intervening on power structures that affect the distribution of wealth and income, policies and tax treatments that introduce distortions and misallocation of resources, regulations that generate rents, and systems of social protection that favor the insiders and hinder economic dynamism.² Everywhere this kind of interventions raises oppositions and unpopularity amongst various groups of population. Indeed, there is often a clear trade off between structural policies enhancing the growth potential of an economy and popular consensus: not a few policies implemented in the rich countries since the slowing down of economic growth in the 1970s can be interpreted as attempts to skip this dilemma by avoiding to intervene on growth fundamentals and at the same time pushing growth in the short term beyond what is sustainable. Such policies share a few features:

i) they tend (openly or through some form of benign neglect) to favor the rapid accumulation of debt by the private and/or the public sector, increasing the recourse to leverage and augmenting the credit intensity of GDP growth (see Figure 1);

ii) they tend to inflate the price of assets (sometimes giving rise to financial or real estate bubbles), but without creating consumer prices inflation;

iii) they tend to have an intertemporal dimension: they “buy” more growth today at the expense of less growth tomorrow when asset prices will cease to rise and it will be necessary to stabilize the debt;

¹ As illustrated by Dabla-Norris et al. (2015): “Output growth declined from an annual average of more than 3½ percent in the 1970s to less than 2½ percent in the mid-2000s just before the crisis. This decline was largely driven by labor productivity. Trend growth in output per hour worked declined from about 3 percent annually in 1970 to less than 1½ percent in 2007. Trend growth extended to encompass the period of the crisis is, not surprisingly, even gloomier”. ² This is consistent with Phelps (2013), who attributes the anemic growth of the advanced economies to the gradual dominance (especially in continental Europe) of policies, social norms and cultural values that dampen the dynamism and vitality of Western societies.
they tend to create rents and distortions in the allocation of resources, favoring activities and investment that in the long run are not growth enhancing.

The first large-scale episode to fall within this category is probably the combination of restrictive monetary policy and expansionary fiscal policy of the early 1980s whereby the U.S. emerged from the stagflation of the previous decade. In fact, this policy mix led to a significant rise in interest rates, enabling the U.S. to attract capital from the rest of the world, and thus financing the strong growth in domestic demand due to the tax cuts and increases in military spending made by the Reagan administration. The ensuing appreciation of the dollar helped—in the presence of a substantial opening of the US domestic market to imports—to contain the inflationary pressures resulting from the increased domestic demand. The difficulties faced by the sector exposed to international competition were more than offset by the boom in services and construction, that gave rise to a robust recovery. The deterioration of the United States’ net asset position with respect to the rest of the world and its large accumulation of public debt were generally regarded as acceptable prices for the renewed dynamism of the US economy. The rest of the developed world, whose capital outflows financed the US recovery, was able to take advantage of the American hunger for imports. The temporary return of the advanced economies to a satisfactory growth rate was therefore achieved by a scheme that has been repeated several times in the post-Bretton Woods era: basically, it hinges on the debt financing of the structural excess of domestic demand in an area of the developed world—typically, but not exclusively, the U.S.—with funds coming from other areas, thus generating what today are known as “global imbalances”, i.e., the large and persistent imbalances in the current accounts of the countries involved.

In the mid 1980s this scheme was at work also in Italy, when the country exited from the stagflation of the previous decade and grew at a rate higher than the average rate of Western Europe, but at the cost of growing external deficits—which could be financed at reasonable rates thanks to the Italian participation in the European semi-fixed exchange rate mechanism—and above all at the cost of public deficits persistently oscillating around 10% of Italy’s GDP. The Italian experience, by the way,
makes apparent the intertemporal trade off associated with policies that push economic growth beyond what it is sustainable, since—beside the traumatic devaluation of the Italian Lira and the crisis of the Italian public finance of 1992-94—also the extremely low Italian growth of the last two decades could be traced back to a non-negligible extent to the necessity to manage the high public debt that the 1980s left behind.

Differently than in the 1980s, the U.S. tax cuts and increases in security and military expenditures of the first half of the 2000s were accompanied by an expansionary monetary policy. Indeed, during the “Great Moderation”, consumer prices inflation was subdued, given the rapidly increasing capacity of the emerging countries to penetrate the world markets with their cheap products. Thus, the U.S. policy mix in the years of George W. Bush led to an excess of domestic expenditures (on the eve of the outbreak of the financial crisis, the current account deficit reached 8% of the U.S. GDP) which was financed in a different way than in the 1980s: predominantly by the emerging economies rather than by the other advanced economies, by predominantly selling abroad debt instruments rather than shares, and by a much larger fraction of total foreign purchases of U.S. financial assets due to official entities (reserve accumulation) rather than to private investors. Furthermore, differently than in the second half of the 1990s, when foreign capital was predominantly attracted by the boom of the “new economy” and financed productive investment in ICT, in the period immediately preceding the crisis capital inflows financed the excess expenditure due to the booming households’ purchases of houses and consumer durables (see Bartolini et al., 2014). As a matter of fact, in a financial environment conditioned by the so-called “global saving glut” (the excess saving generated by the emerging countries) and by the low interest rates set by the Federal Reserve, the “originate to distribute” model permitted to increase leverage and made easier the access to credit, thus creating the conditions for the real estate bubble that led to the financial crisis. In the period preceding the crisis, this bubble was a growth driver for the U.S. economy, which in its turn acted as the growth engine of the world economy. Such growth, therefore, was pumped up by an unprecedented debt build up on the part of
American households and by a similarly rapid build up of U.S. government bonds on the part of the official sector of China and other emerging countries.

Hence, in the immediate pre-crisis period, the U.S. growth process was somehow part of the mechanism that made possible China’s fast growth (see Bonatti and Fracasso, 2010). The secret of the spectacular Chinese growth was the capacity of the system to keep the accumulation rate at a very high level (above 40% of China’s GDP) for a very long period, thus providing with infrastructures, plants and machinery those tens of millions of workers previously underemployed in low-productivity occupations in the rural areas who migrated to work in the modern sectors of the Chinese economy. This was paralleled by a gradual decline of the consumption rate, which was achieved mainly by compressing the share of GDP distributed to the households and to a lesser extent by raising the saving rate of both the government and the households (who could not any longer rely on the welfare provisions of the collectivist era). As China’s capital per capita rapidly increased, it was avoided a too fast fall of the rate of return on capital investment by allowing wages to rise at a lower pace than labor productivity, while the cost of capital was kept quite low for the state-controlled enterprises by permitting to them to have access to it at an artificially low interest rate (thus forcing the savers to subsidize these enterprises). The Chinese state-controlled enterprises, namely the bulk of China’s industrial sector, were not bound to guarantee an acceptable rate of return to their proprietors and in addition could borrow from the banking system (almost entirely controlled by the government) at very favorable conditions. In its turn, the state-controlled banking system could remunerate households’ deposits at very low rates, since in a regime of financial repression Chinese families had no alternative for allocating their savings.

The compression of the households’ share in total income implied that the increase in output obtained in China by the rapid build-up of productive capacity had to be absorbed by external demand.

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3 The average annual rate of growth of households’ expenditures in the period 1997-2008 was 8.2%, 1.3% less than the average annual rate of GDP growth in the same period.
4 In 1999 this share was approximately 90%, while in 2008 it fell below 70%.
China’s export-led growth model, therefore, was the result of the willingness on the part of the Chinese leadership to keep the rate of capital accumulation at an extremely high rate for a very prolonged period of time in order to boost GDP growth, by preserving the convenience to invest in new productive capacity thanks to an income distribution increasingly less favorable to workers and savers. The systematic under-appreciation of the external value of the yuan was functional to this model,\(^5\) which required massive interventions by the authorities leading over the years to a huge accumulation of dollar-denominated reserves and the consequent need of large sterilization operations on the part of the People’s Bank of China.

China’s export-led growth strategy was jeopardized by the sharp fall in world demand that followed the outbreak of the global financial crisis in 2008. The Chinese government responded by implementing massive public investments in infrastructures (4,000 billion of yuan in November 2008; 1,000 billion in September 2012) and shovelling money at heavy industries through the state-controlled banks. These interventions could only postpone the inevitable slowing down of China’s GDP growth, but at the cost of creating underutilized infrastructures, industrial overcapacity and debt overhang. Hence, the Chinese experience seems to show that public investments can hardly strengthen the growth potential of the economy if they are mainly conceived and designed as stimuli to aggregate demand for boosting short-term growth (or—worse than that—if they aim at flattering special interests and getting consensus). This is probably a lesson to be drawn also from the public investment packages whereby Japan tried to revive economic growth in the 1990s with disappointing results, but contributing to bring the public debt-to-GDP ratio to the current very high (230%) level.\(^6\)

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\(^5\) There are various estimates of China’s equilibrium rate of exchange in the 2000s: the simple arithmetic mean of the estimates contained in these studies indicates that the Yuan should have appreciated 19\% in order to reach the equilibrium level of the real effective exchange rate (REER). Furthermore, according to these studies, the under-evaluation of the Yuan had been increasing over the years, with the average appreciation necessary to reach the equilibrium REER going from 17\% in 2000-04 to 26\% in 2005-07.

\(^6\) Brückner and Tuladhar (2010) find that in Japan investment multipliers—although higher than for public consumption—were relatively low and declining over time. However, IMF (2014, p. 104) concludes that "the frequent claim that Japan’s public investment has been wasted does not fully withstand careful examination."
The widening of the global imbalances in the period preceding the crisis was also due to the distortions that the Chinese authorities, having established tight controls over the capital account and a regime of internal financial repression, imposed to the world economy in order to accelerate China’s GDP growth. The global saving glut that financed the U.S. consumption boom before the crisis was—to some non-negligible extent—the consequence of these distortions. At the eve of the financial crisis, some analysts predicted that these growing imbalances would have led to a traumatic flight from the dollar, since—soon or late—the international investors would have realized that the persistent deterioration of the U.S. net position with respect to the rest of the world was unsustainable. Actually, things went differently. It was the unsustainable accumulation of debt on the part of the U.S. households that triggered the crisis, and quite the opposite of what those analysts had predicted happened, namely the “flight to quality” that followed the bankruptcy of Lehman Brothers put in motion a world rush to buy U.S. treasury bills and bonds that strengthened the dollar. This was supported by the reassuring statements on the part of officials of the major emerging economies (China above all) concerning their will to go on holding and buying U.S. assets, and it made much easier for the U.S. authorities to implement that gigantic rescue operation whereby large chunks of private debt were transformed “de facto” into federal debt and large quantities of troubled assets were absorbed by the Federal Reserve.

One could argue that, as the Sino-American imbalances were amplified by the rigidity that China introduced by pegging the yuan to the dollar and by its consequent financing of the U.S. trade deficit through the accumulation of dollar-denominated reserves, similarly the growing imbalances that characterized the Eurozone in the 2000s were fed by the rigidity introduced by abolishing the nominal exchange rates among the countries that joined the European Monetary Union. As a matter of fact, in the period going from the establishment of the euro to the outbreak of the European debt crisis, the absence of nominal exchange rates ended up favoring the systematic under-appreciation (over-appreciation) of the real exchange rate of the euro core (periphery) and the financing of the trade deficit of the euro periphery by the banking system of the euro core.
Paradoxically, the conditions for the increase in prices and nominal wages that undermined the international competitiveness of the euro periphery were created by the optimism with which the markets bet on the fact that, in the absence of the possibility of recovering competitiveness through the devaluation of the nominal exchange rate, the euro periphery would have been forced to align the dynamics of their prices and nominal wages to that of the core countries (see Bonatti and Fracasso, 2014). Indeed, this optimism permitted to the households, the enterprises and the governments of the euro periphery to go into debt paying interest rates much lower than in the recent past, thus stimulating domestic demand and leading their internal prices and nominal wages to grow at a rate persistently higher than in the euro core. This expansion of domestic demand benefited the sectors not exposed to international competition, while the sectors producing internationally tradable goods were shrinking.\(^7\)

Moreover, the opening up of China to international trade and its accession to the WTO turned out to be a true asymmetric shock for the Eurozone: China was directly competing with the southern European producers specialized in labor-intensive industries (like textile), while it represented a new destination market for the German investment goods (see Chen et al., 2012; Mikkelsen and Ruiz, 2012).\(^8\) In addition, the possibility of borrowing at low cost reduced the incentives for the governments of the euro periphery to undertake reforms that could raise productivity and cure the structural unbalances of their public budget, since thanks to this possibility Greece, Ireland and Spain were able anyhow to grow at satisfactory rates, while Italy and Portugal were at least able to postpone painful adjustments. Over time, this deteriorated the potential for sustainable economic growth of the euro periphery, but for years the financial markets looked with benign neglect at the growing loss of competitiveness and trade account deficit of these countries. Only in the aftermath of the revelation of the true state of the Greek government deficit, this benign neglect rapidly became lack of

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\(^7\) These sectors include most manufactured industries and a range of service sectors like finance, consulting, managing multinational enterprises, computer design, R&D, IT administration, and customer service. The non-tradable sectors include most of government, health & personal care, education, construction, retail, hospitality (hotels, restaurants..), and several administrative services (notice that high education and hospitality are increasingly tradable).

\(^8\) Also the extension of the EU to Eastern Europe had asymmetric effects for the Eurozone, since for the euro core—in particular for Germany—it represented an opportunity for de-localizing some production processes in nearby low-cost countries, thereby boosting productivity and profitability, while many areas of the euro periphery suffered because of the competition of the new EU members.
confidence in the sustainability of their high external and public debt. The sudden stop and reversal of private capital flows that followed the outbreak of the European debt crisis made impossible for the peripheral countries to go on financing their excess expenditures and related current account deficits on the marketplace (after the eruption of the global financial crisis, the current account deficit of Portugal and Spain was more than 10% of their respective GDP, while that of Greece exceeded 15% of its GDP). Austerity, i.e., cuts in domestic expenditure, was simply the inevitable consequence of the refusal on the part of the markets to continue financing levels of private and public expenditures structurally in excess with respect to the value of the goods and services that the peripheral countries were able to supply at competitive prices. Without the “exorbitant privilege” that at the height of the financial crisis allowed the U.S. government to borrow from abroad so as to bail out its financial system and sustain its domestic demand, the countries of the euro periphery were able to roll over their maturing public debt and to rescue their banking systems hit by the bursting of the real estate bubble (in Ireland and Spain) only by relying on the interventions of official entities, such as the European Central Bank or the emergency funds established by the Eurozone governments. This involvement transformed the relations among European countries into creditor-debtor relationships, thus creating among them a climate of bitterness and reciprocal resentment.

3. The impact on long run growth of the rise in the price of residential land and urban rents

David Ricardo (1817) gave solid foundations to the concern that land—being a non-reproducible factor in fixed supply—could act in the long run as a brake on economic growth and determine an increasingly unequal income distribution in favor of those who own a disproportionally large portion of it. This concern seemed to fade away when, as a consequence of the industrial revolution, the share of agriculture in national income gradually fell, thus drastically reducing the importance of land as a factor of production and source of value. Recently, a renewed interest in the role of land as a cause of widening inequalities in income and wealth has been aroused by the strong rise in residential land
prices driving the remarkable increase in the value of housing and in the share of housing services in national income observed in many advanced economies during the last four decades (see, e.g., Figures 2 and 3). Such increase, indeed, explains a substantial portion of the rise in the wealth-income ratio and of the decline in the labor’s share of income that have accompanied the growing inequalities recorded in these countries in this period (see Figures 4, 5, 6, 7 and 8). In contrast, less attention has been dedicated to the contribution that the rapidly rising value of housing and residential land may have given to the slowing down of long-term growth affecting the advanced economies since the 1970s.

Any effort to assess the effects of the changing value of residential land and housing on economic growth and inequality should take into account what—according to many critics—Piketty (2013) blurred, that is the distinction between wealth (inclusive of residential land and housing) and “productive assets” (equipment, machinery, plants, softwares…) (see, e.g., Rognlie 2014, 2015; Rowthorn 2014; Stiglitz 2015a). By neglecting this distinction, Piketty (2013) interprets the observed decline in the labor’s share of income as the joint result of a more than unitary elasticity of substitution between capital and labor, and of a persistently positive differential between the rate of return on capital and the rate of GDP growth (which—according to Piketty—accounts for the increase in the capital-income ratio documented in his book). However, the evidence is at odds with the hypothesis that such an increase is mainly due to the accumulation of productive assets replacing labor, since it is explained by the rise in housing prices that occurred in most advanced economies (see Bonnet et al. 2014). Similarly, one can check that a significant portion of the fall in the labor’s share of income taking place in the same period has to be attributed to the rise in the weight of housing services. With this regard, it is worth to emphasize that nowadays a large part of the value of these services is made up of imputed rents, i.e., the value of the services of houses inhabited by homeowners, especially

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9 As correctly observed by Stiglitz (2015a, p. 22), “The wealth income ratio could be increasing even as the capital income ratio (appropriately measured) is stagnating or decreasing. Much of wealth is not produced assets (“machines”) but land or other ownership claims giving rise to rents.”
because in most advanced countries the home ownership rate has increased considerably in the post-
World War II period (see Figure 9).

What are the structural reasons explaining the increase in the value of housing that has been
observed globally in the last four decades? The main ones are probably five. The first one has to do
with the fact—mentioned above—that land is a non-reproducible factor in fixed supply: in areas
becoming increasingly congested with any kind of human activities because of economic growth and
population increase, the relative price of the residential land tends to rise, diving up the market value
of the houses built on it (the process of tertiarization further raises the value of urban areas by making
agglomeration economies more important)\(^{10}\); the second reason derives from the fact that, as income
grows, families tend to spend an increasing fraction of it for living in larger and more comfortable
houses, possibly localized in more attractive neighbourhoods, and possibly for having access to a
second or a third property in some pleasant location; the third reason is associated with the financial
innovations (such as the “originate to distribute” model) that have made much easier and cheaper for
a large number of households to get a mortgage for the purchase of a house; the fourth reason refers
to the effects of the tighter regulations that in many areas restrict housing density, size and height
of buildings etc., and the fifth reason concerns the favorable tax treatment applied in most countries
to residential properties (in particular, to owner-occupied houses).

It is likely that the trends outlined above negatively affect long-run economic growth because of
the crowding-out effect exerted on investment in (material and immaterial) productive assets by the
high rate of return on housing investment,\(^{11}\) which is raised by the expected capital gains obtainable
thanks to the long-term increase in house prices. It is worth to notice that such increase has been

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\(^{10}\) As argued by the so-called ‘new economic geography’, “firms agglomerate to benefit from ‘Marshallian externalities’
such as the spreading of knowledge among similar industries, a greater pool of labour to choose from or the ability to
access indivisible goods such as conference venues or airports. Hence, when operating within proximity of each other,
firms can save on transaction costs and enjoy greater productivity.” (Békés and Ottaviano, 2016: p. 29).

\(^{11}\) The hypothesis that the increase in the value of residential land that has driven up house prices displaces productive
investment was explored by Stiglitz (2015b). Bonatti (2016) incorporates residential land and housing in a model allowing
to analyze their impact on long-run growth and inequality.
paralleled in the last decades by a decline in the relative price of investment goods observed (see Figure 10), due to the tendency of technological progress to be faster in the production of investment goods than in the production of consumer goods and services. Given these opposite trends in the prices of housing and investment goods, any investment in plants, equipment, software and similar must generate a higher increment in expected profits in order to be undertaken. Furthermore, the rising share of total income consisting of rent paid or imputed to house owners has compressed also the labor’s share of total income, with disincentive effects on labor market participation and investment in human capital. These disincentive effects are probably more relevant in recent years, when—as an effect of the ageing population and the decreasing fertility rate—a relatively large fraction of the workforce inherits or expects to inherit some real estate wealth, rather than in the past, when most households could become owner of a house only by buying it with their own labor income. Hence, one should expect that the higher wealth-to-labor income ratio brought about by the rising house prices has had some impact on the work attitudes of a sizeable portion of the middle and low-middle class, by raising their reserve wage, reducing the propensity to participate in the labor market of elderly, spouses, teenagers (in particular, postponing young people’s entry in the job market), and discouraging labor mobility.12

It is significant with regard to what emphasized above that in 2010 the median net wealth of households appeared to be higher in the euro periphery than in the euro core (see Table 1), in spite of the fact that the median income was considerably higher in the euro core. This is entirely due to the larger value of the housing stock owned by the households in Southern Europe. Thanks to this stock, for instance, the mean net wealth of the Italian households was in 2014 still slightly higher than that of their German counterparts (this difference was much larger in 2010 at the beginning of the

12 Phelps (1994) models economies in which a rise of the ratio between wealth per worker and wage depresses employment through its effects on labor supply. Blanchflower and Oswald (2013) document the positive link between home ownership in a geographical area and subsequent high unemployment in that area, suggesting that higher levels of home ownership reduce mobility, increase commuting times and reduce rates of business formation.
European debt crisis), although in 2014 the Italian per capita income was 75% of the German one.\textsuperscript{13}

One may think that the households’ propensity to invest in housing is comparatively stronger in societies—such as those of the Southern European countries—where family values and ties are particularly felt (see Reher, 1998; Micheli, 2012), being the house also symbolically the place of family life and at the same time the vehicle par excellence for the intergenerational transmission of family wealth. More prosaically, in some of these countries rent regulations that reduced the quantity and quality of houses available for rent, scarce availability of public housing and tax treatments extremely favorable to owner-occupied houses may have further stimulated people’s inclination to buy one’s own home. The propensity to invest in real estate is also strengthened by the low levels of financial literacy and trust in capital markets (in contexts where capital markets—especially stock markets—are particularly opaque) that characterize Southern Europe. More important for its effects on long-term growth is the link between the over-capitalization of households (largely due to their housing wealth) and the under-capitalization of those small- and medium-sized family firms that in Southern Europe account for a very large share of total employment and output. Indeed, such chronic under-capitalization causes financial fragility and prevents the family firms to grow to the scale needed for them to invest more in R&D and compete more effectively on the global market. As in other countries, the tax deductibility of interest expense certainly played a role in unbalancing the capital structure of these firms in favor of debt. However, one can reasonably guess (no systematic evidence is available) that in countries such as Greece, Italy, Portugal and Spain (where the total tax rate on companies’ profits are higher than the average EU & EFTA rate—see Figure 11—and the incidence of tax avoidance and evasion is comparatively high), substantial amounts of resources generated by small and medium firms have been used over the years to accumulate real estate assets.

\textsuperscript{13} According to the Annual Report of the Bank of Italy, in 2014 the net wealth of Italian households was about 6 times Italy’s GDP, a value only slightly larger than that of the years immediately preceding the global financial crisis, and the value of housing was approximately 56% of that wealth. Also notice that the share of housing rents (both actual and imputed) in Italian GDP has persistently increased since the beginning of the 1980s, going from 5% in 1980 to 13% in 2014. It is significant that in the last 15 years—in which the labor’s share of Italian GDP has grown—such increase has occurred entirely at the expense of profits (see Torrini, 2016).
that are part of the personal wealth of the firm owners, rather than to be reinvested in the company business.

The possibility that in some rich countries the accumulation of productive assets has been displaced to some extent by investment in non-productive assets, particularly property for residential use, is related to the fact that the capital gains ultimately associated with the growing value of residential land has been almost entirely privately appropriated. If these capital gains are not properly taxed, or if some well-designed property tax is not levied on the value of residential land, it is introduced a major source of distortion in the allocation of capital. It is indeed the case that the economic rents generated by these properties are values produced by the actions of a myriad of individuals and of public interventions such as investment in infrastructures. Hence, both efficiency and equity considerations do not justify the private appropriation of these values.

4. Is the support guaranteed by the monetary authorities to the prices of financial assets crowding out investment in productive assets?

The high level of (private and public) debt inherited from the global crisis and the structural lowering of the growth potential of the rich countries coexists with the overcapacity that looms in various parts of the world and with asset prices that have returned to high levels as an effect of the expansionary monetary policies of recent years. Indeed, central banks managed to halt the fall in asset prices that followed the outbreak of the financial crisis, and then to push them upward by absorbing large quantities of private and government assets in their portfolio and pumping liquidity in the system. In the aftermath of the Lehman Brothers’ collapse, also fiscal stimulus packages contributed—at least in those countries that had some fiscal space—to prevent a fall in prices and the generalized chain of defaults that occurred during the Great Depression. In this way, the deleveraging

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14 In most countries capital gains from the sale of a house are taxed at low rates, and in many countries there are partial or full exemptions for owner-occupied houses or for properties held longer than a certain period of time (e.g. 5 years in Italy).
process could unfold in the private sector without a destruction of wealth comparable to that of the 1930s.

In the case of the European debt crisis, the prospect of massive defaults on government debt by the peripheral countries was removed (with the exception of Greece) only more than two years after the outbreak of the crisis, when in the Summer of 2012 the European Central Bank committed itself to intervene—if necessary, virtually without limits\textsuperscript{15}—in support of periphery’s debt. This prevented the exit of these countries from the Eurozone, with subsequent currency devaluations and defaults on external debt. The wealth owners of the euro periphery benefited from this policy, since it avoided a rapid fall in the value of their assets (land and housing in particular) relative to foreign assets, together with the retirees and the workers holding secure jobs (like the public employees), who could preserve the bulk of the purchasing power of their pensions and salaries without risking to lose their source of income. However, in the presence of a cost structure too high relatively to its productivity level, the impossibility of depreciating the nominal exchange rate with respect to the euro core condemned the euro periphery to regain its competitiveness by painful (and only partially successful) internal devaluations. The structural adjustment made necessary in the countries of the euro periphery by the growing imbalances characterizing them before the crisis would have been less costly in terms of loss of GDP and increase in unemployment without the rigidity brought about by the euro. It is straightforward that these greater costs should be weighted against the political cost of the break-up of the Eurozone (triggering large-scale write-offs of public debt and major bank crises), and—in a longer term perspective—against the costs that the peripheral countries would incur by returning to the monetary instability that they were used to experience in the pre-euro era. Nevertheless, being part of the Eurozone restrains the growth potential of those countries that are unable to close the gap in competitiveness vis-à-vis the euro core, since any attempt to accelerate the expansion of their domestic demand tends to worsen their trade balance with respect to the euro core and—considering

\textsuperscript{15} In the Summer of 2012, the European Central Bank announced that, if necessary, it would have bought unlimited quantity of bonds (with maturities between 1 and 3 years) issued by Eurozone member states in secondary markets, provided the bond-issuing countries agree to certain domestic economic measures (“Outright Monetary Transactions”).
that the external value of the euro reflects primarily the competitiveness of the euro core—also with respect to the rest of the world.

Central banks’ responses to the crisis have prevented that radical cleaning of the balance sheets of private and public entities—and the consequent debt write-offs and bankruptcies—which would have made the crisis more violent, but which would have set forth more rapidly the conditions for a robust recovery. Waiting for this robust recovery, non-financial enterprises are inclined to postpone their investment in productive assets and to hoard liquidity, or to return it to their owners in the form of dividends and/or of buyback of shares, thus supporting their share prices (Blundell-Wignall and Roulet, 2013). In this way, no robust recovery does materialize, but investors’ optimistic expectations concerning stock prices are validated. These tendencies have been accentuated by central banks’ quantitative easing programs, which—by aggressively pushing down interest rates—make convenient for non-financial enterprises to go into debt in order to boost their shareholders’ remuneration rather than to invest in their business. In addition, investors are induced to increase their risk exposure so as to obtain higher expected returns, recomposing their portfolios in favor of emerging markets, corporate bonds and stocks. Obviously, this may fuel asset price bubbles and excessive leverage, thus creating financial fragility. Finally, beside worsening wealth inequality to the advantage of asset holders, the support guaranteed by the monetary authorities to the prices of financial assets (the so-called “central bank Put”) appears to crowd out investment in productive assets, since it raises the expected rate of return that the latter have to offer in order to match the rate of return that financial assets are expected to offer thanks to the central bank Put. Critics of quantitative easing may therefore state that, by intervening to support asset prices and maintain the

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16 Gruber and Kamin (2015) show that, even before the beginning of the global financial crisis, it was already apparent the tendency of non-financial enterprises to allocate an increasing fraction of their profits to their shareholders’ remuneration (in the form of dividends or share buybacks) and—to a minor extent—to the purchase of financial assets, rather than to invest in their business. They set down the hypothesis that at the root of this behavior there is a perceived decline of the available investment opportunities.

17 According to the analysts of the Bank of America Merrill Lynch, in the period between the bankruptcy of Lehman Brothers and mid 2016, there were 667 interest rate cuts by global central banks, which added approximately $12 trillion to their balance sheets to a total of $25 trillion.
illusion of solvency, central banks exacerbate the causes that make economic growth anemic and lead to a dangerous decoupling of asset prices from their underlying economic fundamentals.

As a matter of fact, the central banks of the advanced economies seem to face a dilemma: if they do not pump liquidity, asset prices fall and interest rates rise, thus straining troubled debtors such as Southern European governments or entities located in emerging economies; if they give priority to supporting asset prices and to shoring up bad debts, they favor new borrowings that will be hardly repayable and preserve a fictitious wealth that keeps too high the economy’s cost structure and displaces investment in productive assets. In the middle of this dilemma, central banks continue to validate investors’ expectations regarding the prolongation of ultra-expansionary monetary policies, and any opposite signal concerning their intentions immediately unsettles the financial markets, forcing central bankers to promptly reassure them about the continuation of the current stance of monetary policy. This gives rise to rational bubbles, since it is rational for investors to bet on the monetary authorities’ continuing support of asset prices. The hesitations of the Federal Reserve to implement its announced exit strategy show how problematic is to find a way out of this sort of “central bank policy capture”. In the case of the European Central Bank, the commitment to provide unlimited support to Eurozone countries’ asset prices has been often presented as a strategy to buy time in order to allow to the structural reforms undertaken by the member countries to produce beneficial effects on their growth potential. It is apparent that this strategy is exposed to the risk that the governments of the countries more in need of these reforms may utilize the relief obtained by this ultra-expansionary monetary policy to dilute or postpone them.

5. Summers’ Secular Stagnation and its Critics

The limitations on the capacity of ultra-expansionary monetary policies to lead the advanced economies towards a sustainable—although not anemic—growth path represent for many commentators a strong argument in favor of an internationally coordinated fiscal stimulus. As a theoretical rationale for such a stimulus, Summers (2013, 2016) revived the term “secular stagnation”
coined by Hansen in 1938. By this term, Summers intends to characterize a situation where aggregate demand is endemically deficient because the real long-term interest rate is higher than Wicksell’s “natural” interest rate, i.e. the interest rate at which desired investment and desired savings are equal whenever total income is at its potential level (and the unemployment rate is at its NAIRU level). Summers claims that such a situation is likely to have occurred in the advanced economies, since the natural interest rate has probably become strictly negative, but central banks can hardly push nominal interest rates below zero (“zero lower bound”) (see Figure 12). In its turn, the fall of the natural interest rate is due to the fact that the desire to spend in investment goods tend to be depressed because of structural features that include the lack of profitable investment opportunities, the ageing of population and the decline in the relative price of investment goods, while the propensity to save has not fallen enough to offset this reduction of desired investment. Other researchers notice that this discrepancy has been exacerbated by the growing demand for safe assets issued by the advanced countries on the part of emerging countries whose savings are rapidly increasing but whose domestic capital markets are quite undeveloped.

In circumstances such as those outlined above, the secular stagnation story suggests that a deflationary process can be easily set in motion, with total income remaining persistently below its potential level and unemployment above its NAIRU level. Moreover, long-run growth is supposed to be negatively affected as persistent unemployment erodes workers’ skills and protracted investment slumps reduce productive capacity. Summers stresses that in this situation accommodative monetary policies can be effective in bringing back income to its potential level and unemployment to its NAIRU level only by triggering speculative bubbles in asset prices that stimulate aggregate demand. However, bubbles and build-ups in leverage can easily cause instability and financial crises: the years

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18 With regard to this, Stiglitz (2016, p.642) points out: “The zero lower bound (ZLB) does not adequately explain the limitations on the efficacy of monetary policy; if it did, the government could use tax policy (increasing consumption taxes over time and decreasing investment tax credits) to change intertemporal prices in the same way that lower interest rates would. Real interest rates have been negative 2%, and a further decline to negative 3% or 4% would, I suspect, have minimal effects.”

19 Caballero and Farhi (2015) emphasize how both the U.S. financial crisis and the European sovereign debt crisis accentuated the global safe asset shortage, with depressing effects on world aggregate demand.
of the “Great Moderation” showed that during financial booms it is not sufficient to let the economy expand at its potential, i.e., along a path characterized by stable inflation, for guaranteeing macro sustainability, namely for avoiding sudden and painful corrections made inevitable by growing domestic or external macroeconomic imbalances (see IMF, 2015).

In a nutshell, Summers’ secular stagnation amounts to the hypothesis that anemic growth in the advanced economies is mainly due to insufficient nominal demand, and the policy prescription that naturally follows from this hypothesis is that an appropriate dose of fiscal stimulus can fix the problem. Skepticism concerning the validity of Summers’ hypothesis to explain the current U.S. situation is expressed by Gordon (2015), who substantially considers Summers’ revival of an idea developed during the Great Depression as an economics example of the military saying “Generals always fight the last war”. Indeed, Gordon remarks that “… the conditions of aggregate demand and supply in 2015 are the mirror image of those in 1938 when Hansen wrote. The nation in 1938 faced a crisis of woefully inadequate aggregate demand but not of aggregate supply, because the underlying rate of productivity growth in the late 1930s was as fast as at any time in U.S. peacetime economic history. In contrast the 2015 output gap is small and shrinking, while productivity growth has almost ground to a halt when viewed from the perspective of the last century” (Gordon, 2015: pp. 1-2). More specifically, he points out that “The large output gap of Hansen’s 1938 America was the leading symptom of an economy starved of aggregate demand, a far contrast from the small output gap in today’s economy. In contrast the economy of the late 1930s was enjoying robust productivity growth, with annual growth of output per hour of 3.8 percent between 1937 and 1940. This was more than five times faster than the anemic 0.6 percent annual growth rate of output per hour in the five years ending in 2014:Q4. This is the “mirror image” previewed in the introduction – flagging aggregate

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20 This is why the current measures of the “output gap” may be misleading as guides for macroeconomic policies. Borio et al. (2013) propose “finance-neutral” output gap measures, which can indicate whether output is above its sustainable level because of financial developments, regardless of what happens to inflation.
demand with robust productivity growth in the late 1930s as contrasted to “almost adequate” aggregate demand in 2014 combined with slow productivity growth” (Gordon, 2015: p. 6).

Gordon’s thesis that the post-crisis disappointing recovery of the U.S. economy reflects the long-term slowdown of productivity growth experienced since the 1970s—temporarily interrupted in the 1990s as a result of the ICT revolution—is hardly reconcilable with Summers’ idea that chronic deficiency of aggregate demand is the main cause of the anemic U.S. growth. Indeed, Gordon (2012) argues that the innovations which have occurred since the 1970s have not determined the impact on the U.S. economy and society that technical progress had instead achieved in the previous fifty years. The difficulties of identifying innovations, quantifying their extent, and determining with acceptable accuracy the period in which they exert their effects on the economy, make it hard to reach firm conclusions as to the validity of Gordon’s thesis.

Instead, the hypothesis that the gradual loss of momentum affecting the advanced economies is a symptom of Baumol’s disease—i.e. of the shrinking of the sectors where productivity tends to grow more to the advantage of the sectors where it tends to stagnate—is consistent with the remarkable decrease in the manufacturing’s share of total GDP and the consequent tertiarization that has taken place in the developed countries in the last decades (in today’s advanced economies, services represent between two thirds and three fourth of total output). The differences in labor costs and environmental standards between rich and developing countries, which has led to a significant shift of manufacturing from the former to the latter, has accelerated this trend, although it has not affected all the advanced countries to the same extent. However, it is still an open issue to what extent the difficulty of measuring quality and performance improvements in health & social care services, finance, I&C systems etc. may lead to a systematic underestimation of aggregate productivity growth and thus of GDP growth. If this underestimation were substantial, then correctly measured economic growth would be not anemic and no secular stagnation would be under way.
Doubts about Summers’ secular stagnation are shared by Hamilton et al. (2015), who claim that the evidence supporting it before the 2008 crisis is weak, since the timing of the U.S. asset bubbles is inconsistent with the stagnation story, while in each of the last three cycles there have been prolonged periods where GDP overshot potential, unemployment was below the NAIRU level and inflation was on the rise. Furthermore, according to Hamilton et al. (2015), the long-run equilibrium U.S. real interest rate remains significantly positive and the weakness of the post-2008 recovery can be better explained by protracted—but ultimately temporary—legacies of the financial crisis. Indeed, as emphasized by Lo and Rogoff (2015), a negative feedback loop between high debt, deleveraging and slow GDP growth can be easily set in motion by the debt overhang (including public, household, corporate, financial and external debt) left behind by the prolonged credit boom that preceded the crisis.

6. Competitiveness imbalances, underutilized resources and the impotence of fiscal policy

As discussed in the previous section, expansionary fiscal policies—possibly internationally coordinated—are invoked as an alternative to monetary stimuli in order to revive economic growth in the advanced economies (DeLong and Summers 2012; Summers 2016). The consensus on this prescription is not restricted to the secular stagnationists, since all those convinced that at the root of the current sluggish growth there is a lack of aggregate demand agree upon it (see, e.g., Krugman, 2016; Roubini, 2016; Spence, 2016; Stiglitz, 2016). An easy objection against these fiscal stimuli is that a debt-financed fiscal expansion may be undesirable or even unfeasible for the many advanced economies whose outstanding public debt is very high. Those in favor of them reply by noticing that this objection does not hold in an environment in which long-term interest rates on government bonds are extremely low or even negative. Hence, they argue that—in the presence of a liquidity trap—a money-financed stimulus to aggregate demand, in the form of a direct injection of cash into the hands of households (“helicopter money”), or of a permanent monetization of government expenditures, is
a cheap and effective way to contrast deflationary impulses and boost growth. In particular, the supporters of a fiscal stimulus financed by EU official entities advocate large investment projects to be undertaken in the member countries in order to relaunch growth in Europe (the Juncker plan is for them only a modest approximation of what would be necessary to reach this objective). The necessity of this kind of intervention is mainly motivated by the fall in overall investment that has occurred in Europe (above all in the Eurozone) since the beginning of the global crisis (see Figure 13). Critics emphasize how—before the crisis—the Eurozone’s investment rate was abnormally high because of the unsustainable credit boom underway in many countries (e.g., Gros, 2014). Furthermore, they point out that the declining growth rate of working age population and total factor productivity (TFP) that characterizes the Eurozone is hardly compatible with a much higher sustainable rate of investment, especially considering that the capital-output ratio is already quite high in the Eurozone (considerably higher than in the U.S., see Figure 14), thus determining a low rate of return on capital investment. This skepticism about the possible positive effects of massive public investment packages on long-term growth is reinforced in the case of countries—like Greece or Italy—for which there is evidence showing that increases in public investment are translated into small improvements in the quantity and quality of public assets because of wastes and inefficiencies (see IMF, 2014).

Although there is a broad agreement on the need for greater public spending on carefully selected high-return investment projects that can positively affect the growth potential of the economy, we have already seen that doubts have been raised about the possibility that a generalized fiscal expansion can move the advanced economies towards a higher long-term growth path. In addition, reasons to fear that such a stimulus would have counterproductive effects have been set forth. The rest of this section will discuss such issues.

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21 See Wood (2012), Reichlin et al. (2013). Borio et al. (2016) argue that a money-financed fiscal program is more expansionary than a debt-financed program only if the central banks credibly commits to setting policy interest rates at zero forever.
Basic Keynesian economics suggests that a fiscal stimulus is appropriate when there are productive assets (including human resources) that are underutilized because of lack of demand. However, some stylized facts seem to indicate that at the origin of the excess capacity and idle labor currently existing in some areas there are structural factors that can be hardly removed by fiscal expansions. These structural factors have to do with the persistent competitiveness imbalances between countries and regions, namely with the enduring disparities in their capacity of attracting and fostering the development of “competitive firms”, which are those that “hire more workers, offer better job security, pay higher wages, invest more (also in human resources), generate more revenues and profits, and therefore allow regions to raise more tax revenues for any given tax rate” (Békés and Ottaviano, 2016: pp. 36-37). Indeed, the quality-cost effectiveness of the area where firms are located has a remarkable effect on their competitiveness, while the concentration of competitive firms in an area originates those “Marshallian externalities”—such as knowledge spillovers or better opportunities to access indivisible infrastructures and find any sort of business services and skilled labor—that make the area more attractive for firms’ location. It is often the case that differentials across areas in input costs are not sufficient to offset the gap among them in terms of overall productivity due to the different quality of their institutions, their different endowments of social capital, the different presence of agglomeration economies in their territory and similar features that are inherited from the past and can be hardly eliminated—at least in the short run—by policy actions.

Disparities among areas in the capacity to create good jobs have been exacerbated in the rich countries by technological developments and spatial shifts of manufacturing industries from these countries to the emerging economies. Consistently with the “routinization hypothesis” (see Autor et al., 2003), medium-skilled workers performing routine tasks are displaced by automation, while new technologies increasingly combine highly educated workers engaged in creative and abstract tasks.

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22 In response to the criticism of Krugman (1994) and others about the use of the term “competitiveness” with reference to nations or regions, Békés and Ottaviano (2016: p. 36) rightly point out that “the only meaningful outcome that can be called ‘competitiveness’ of a region is the performance of its firms relative to their competitors in benchmark regions.”
with sophisticated tangible and intangible assets. Investment in intangibles (design, R&D, software and databases, brand names…) represents a growing fraction of total investment in the advanced economies (see Corrado et al., 2012) and typically give rise to imperfect competition in product markets entailing substantial mark-ups for the few market leaders (see Turner, 2014). Thus, strategic and high value-added functions related to the intangible-intensive sector have been concentrated in relatively few places, while lower value-added tasks have been offshored during the process of international fragmentation of manufacturing production that occurred in the two decades preceding the global crisis (see Baldwin, 2006; Timmer et al., 2013). Together with the emergence of global value chains,²³ the recent past has seen the steady increase in the advanced economies of low-skilled service jobs (personal and health care, retail, hotel and restaurants, security, etc.) that cannot be eliminated by the existing technologies and reflect the growing share of services in total domestic demand. This demand for unskilled workers by the labor-intensive service sectors is met by the virtually unlimited world reservoirs of labor underemployed in low-productive occupations in rural areas or in the informal parts of the urban economy.

The polarization of the labor market that is underway in most advanced economies is particularly accentuated in the countries where manufacturing has shrank the most. Under this respect, it is significant that the preservation of its strong manufacturing base is considered a priority by Germany’s establishment. Its intensively export-oriented manufacturing industry is an important source of relatively stable and well-paid jobs for medium-skilled workers, it is supported by a training system functional to it, and it is the core of a corporatist socio-economic model hinging on cooperative long-term relationships among entrepreneurs, unions, schools and banks. Despite the emphasis that the Obama administration has placed on relaunching the manufacturing sector, the German growth model is very different from the U.S. one, where GDP growth is typically driven by the expansion of domestic demand, concentrated on services, associated with large personal debts, and characterized

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²³ There is some evidence that the slower pace of expansion of global value chains is an important determinant of the decline in the long-term responsiveness of international trade with respect to income observed in the 2000s (see Costantinescu et al., 2015).
by high income inequality. Hence, it should come as no surprise that German main social and political forces have resisted IMF and OECD suggestions of implementing financial market reforms and service market liberalizations that would have made the German growth model more similar to the U.S. one (see Bonatti and Fracasso, 2013). In contrast, reforms carried out by German governments in the early 2000s were mainly aimed at restoring the competitiveness eroded in the previous decade following unification, so as to face the global competition of the new emerging industrial powers, in the awareness that low-growth Europe was going to become less and less important in the future as a market for German investment goods and high-quality consumer durables. Actually, in the 2000s Germany progressively increased its exports towards non-European and non-OECD countries (in 2015 only 9.1% of total German export was directed towards the Southern European members of the Eurozone, i.e., Greece, Italy, Portugal and Spain): world merchandise export shares indicate that Germany is practically the only advanced economy that retained almost constant shares notwithstanding the rapidly expanding shares of large emerging economies.

Germany can preserve its large capital goods and consumer durables industries only by relying on buoyant foreign demand for its products, and the reforms of the early 2000s were instrumental to strengthen its world competitiveness by letting real wages grow slower than labor productivity. Also in China, as already noticed, real wages persistently lagged behind labor productivity, and it is not by chance that the two world’s best performers in matter of export shared this pattern, while in most of their trade partners wages did not increase slower than productivity. However, in the absence of rigidities limiting the possibility of exchange rates to respond to the divergent evolution of economic fundamentals, such a differential in the dynamics of wages and productivity would have brought about an appreciation of the Chinese and German currencies relatively to the currencies of their competitors, thus offsetting their gain in competitiveness. In the case of China, this did not happen because the government managed for years to keep the yuan underappreciated; in the case of Germany, this did not happen because the external value of the euro does not fully reflect the differential in economic fundamentals between Germany and non-euro countries (since the external
value of the euro reflects also the economic fundamentals of the rest of the Eurozone), and because competitiveness disparities within the Eurozone cannot be corrected through nominal exchange rate movements. This may help explaining the high level reached by the German current account surplus (above 8% of its GDP), which has been also recently indicated by many commentators (especially in the Anglo-Saxon countries, but not only) as a proof that Germany is pursuing a ‘beggar-thy-neighbor’ policy, a sort of ‘social dumping’ (by one of the countries with the highest wages in the world!) that damages the rest of the world and in particular its Eurozone partners. Taken seriously, this accusation implies that a country’s efforts to improve its position in the international division of labor by retaining and attracting high added-value activities are incompatible with the cooperative behavior that should predominate in international economic relations, even when the country in question fully respects the rules that govern world trade. In particular, for a member country of the European Union, this accusation would entail that any gain in competitiveness, achieved through the capacity of its political and institutional system to induce economic and social actors to forgo immediate advantages for greater benefits in the medium-to-long term (capacity that other member states do not have), is an unacceptable dereliction of its duty of solidarity towards other member states.

In the name of this solidarity, Germany is also blamed for not having pursued a more expansionary fiscal policy, which would have helped the peripheral countries of the Eurozone to recover in the aftermath of the outbreak of the European debt crisis. In reality, it is likely that the positive spillovers to the periphery generated by a fiscal stimulus in Germany would have only slightly attenuated the intensity of the consolidation efforts that the peripheral countries had to make anyway as a consequence of their imbalances (see, e.g., in ’t Veld, 2013). Moreover, over recent years the German economy has been close to full employment, and any firm stimulus to domestic demand has to be met by large inflows of immigrant workers (that a large portion of the German society find undesirable) and is inevitable associated with increases in the production costs of the tradable sector which will reduce its price competitiveness (that may undermine the success of the German model). In addition to these effects, an expansionary fiscal policy today is deemed to be at odds with the need of a rapidly
ageing society to face higher health and pension costs in the future. Indeed, basic principles of economics indicate that it is perfectly normal for a mature economy whose population is ageing to run current account surpluses (implying that it is the persistent U.S. current account deficit which is pathological!). These considerations explain why German governments are reluctant to implement large fiscal stimuli and why the fact that a country like Germany runs a current account surplus should be considered structural. What is abnormal is the high level reached by this surplus in recent years, which—as already emphasized—is to a large extent an (undesired) result of the distortions caused by the euro.

The Southern European members of the Eurozone are among the countries in the rich world where all measures of labor underutilization are the highest (see Figures 15 and 16). In ample areas of these countries, the level of private wealth and public entitlements enjoyed by most people, and above all the standards of living and aspirations to which they got used, have become hardly reconcilable in the course of the globalization process with the quality of their institutions and social capital, their comparative advantages and role in the international division of labor, their overall productivity. Unable to offer an environment suitable for the flourishing of high value-added activities and too costly for attracting and retaining activities at the low end of the value chain, these areas can be considered among the losers of the globalization taking place in the recent decades. Increasing private (and—in the case of Greece—public) foreign indebtedness, or large public transfers (in the case of South Italy), have permitted for years to conceal their structural weaknesses. After the outbreak of the European debt crisis, it has occurred a rapid (and in the case of Greece brutal) downward readjustment of the living standards toward the real possibilities of these areas. As a matter of fact, during the adjustment process made necessary in the euro periphery by the imbalances that led to the European debt crisis, all the sectors that had inflated in the years preceding the crisis because of the growing domestic demand (construction, public services, retail…) shrank and lost jobs. The tradable sector has not succeeded in replacing the jobs lost in the non-tradable sectors also because the choice made by the Southern European members of the Eurozone to keep the euro has allowed them to regain
only partially (through painful internal devaluations) the competitiveness lost in the pre-crisis period. Hence, the fall in domestic demand experienced by the Southern European countries was not counterbalanced by an offsetting increase in foreign demand. In fact, the gradual elimination of the external deficits that these countries displayed in 2010 was achieved overwhelmingly through the fall in import brought about by the reduction of domestic demand. Therefore, it is legitimate to think that a significant fiscal stimulus would provide the euro peripheral countries with some temporary relief mainly due to the effects of the stimulus on the sectors not exposed to international competition, but without moving the economy towards a sustainable high-growth path. One should expect, indeed, that the external constraint would soon be binding again (also because international investors would be less willing than in the recent past—given the lessons of the recent sovereign debt crisis—to give credit to countries with weak economic fundamentals). Previous experiences are also teaching that adjustments and reforms that may improve these fundamentals are often softened or postponed when expansionary policies give some relief. Thus, in the anticipation that the acceleration of growth fueled by the increase in domestic demand due to the fiscal expansion will be transient because of the above-mentioned constraint, it is likely that investment in new productive assets will languish, thus dampening the impact of the stimulus on GDP growth.

Greece and South Italy exemplify some of the reasons for which it is unrealistic that sustainable long-term growth can be revived by fiscal stimuli in those large areas of Southern Europe that have exhibited the worst performances in recent years with regard to GDP growth and labor-market indicators. Greece and South Italy share some structural features (see Alcidi et al., 2015): 1) a restricted employment base (very low female and youth employment rate) and a relatively large fraction of workers in public employment and in irregular occupations; 2) a small manufacturing sector and an endemic competitiveness problem: economic activity is heavily dependent on domestic demand (and on public expenditure) and GDP growth is typically driven by the non-tradable sectors of the economy; 3) (very) small firms’ size: firms tend to be active in low valued-added service sectors, to spend little in R&D and to not be innovative (as a result, in recent years labor productivity
and TFP growth has been quite disappointing); 4) poor social capital endowment and low-quality institutions. Moreover, both economies were hit in the last two decades by three common shocks: i) the accession to the global market of China and Eastern Europe, ii) the introduction of the euro (both shocks exacerbated their common problem of having the cost structure of a rich country but the overall productivity of a middle-income country), and iii) the fiscal contraction that followed the euro debt crisis, which was not alleviated by an increase in export because of their poor price and non-price competitiveness.

An important difference between Greece and South Italy is that the former could access to external funds mainly by borrowing from abroad (although Greece has been a net recipient—since its accession to the European Community in 1981—of non-negligible amounts of European funds), while the “Mezzogiorno” is part of a transfer union, being the recipient of substantial and permanent fiscal transfers from the rest of Italy (close on average to 20% of its GDP) that support its private and public consumption. Obviously, these transfers lead to higher tax rates in the rest of Italy, with depressing effects on competitiveness and long-run growth. Exactly as wages and prices inflated in Greece in the 2000s as an effect of the inflow of foreign capital that financed its excess of public expenditures, public transfer inflows have contributed to permanently raise the level of prices and production costs of the Mezzogiorno relatively to its own productivity. One should also add that, since the beginning of the 1970s, the nominal wage levels negotiated at the national level are extended to the whole of Italy, in spite of the remarkable productivity and unemployment differentials between Center-North and South (and in spite of a differential in terms of cost of living that is significantly in favor of those resident in the South). As a result, salaries and wages in the formal segment of South Italy’s labor market respond very slightly to the labor-market conditions prevailing in the area. In other words, the Mezzogiorno was already part of a malfunctioning currency union long before its accession to the Eurozone, while Greece’s problem of having production costs quite higher than those
of the neighboring countries (with similar productivity levels) was very exacerbated by its accession to the euro and the consequent heavy borrowing from abroad.24

The South of Italy appears to display many symptoms of the so-called "public resources curse", according to which the separation on a permanent base of a society’s possibility to consume and to enjoy welfare benefits from its capacity of generating income makes in the long time this society addicted to these public funds, thus creating distorted incentives both for the ordinary citizens and the local élites. This has become more apparent since the early 1970s, when Italy decentralized to locally elected political bodies («regioni») the decisions concerning a large portion of the public funds spent locally but coming from the national government. Some have argued that, given the low stock of civic capital in the Mezzogiorno, and therefore the clientelistic and often corrupt habits of the local élites, this power devolution has worsen the allocation of public resources in the area and has led in many cases to wastes of public funds, with negative effects on economic growth. Hence, all considered, it not surprising that no convergence in the level of per capita GDP has taken place since the beginning of the 1970s between the Mezzogiorno and the rest of Italy (South Italy’s per capita GDP has remained below 60% of that of the Center-North).

Being part of the rich world has not helped the depressed areas of South Europe to reduce their competitiveness gap in the aftermath of the crisis, since in these areas most population got used to levels of private and public consumption quite higher than those of countries—like most Eastern European countries—with comparable levels of overall productivity, but whose population enjoyed lower standards of living over recent decades. Furthermore, people’s aspiration levels in the less productive areas of the rich world are not significantly lower than those prevailing in the most productive areas. This is part of a more general trend that is underway worldwide (also in many developing countries), namely that—also as a result of the growing fraction of total population that

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24 As a measure of the price and cost competitiveness of Greece in the aftermath of the outbreak of its debt crisis, consider that in 2011-2013 the price level was on average 55% higher in Greece than in Turkey, while in 2012 the hourly wage in the manufacturing sector was (in euro) 14.7 in Greece, 2.9 in Bulgaria, 6.6 in Poland, and 3.8 in Romania.
attains medium or even high levels of education—there is an increasingly large number of people with these levels of education that in many areas have difficulties finding a job requiring an education level not lower than that they attained. The hypothesis that is put forward here is admittedly speculative, although it is supported by some evidence: the tendency of the competitiveness imbalances among countries and regions to be wide and persistent (also because of the growing importance of agglomeration economies) determines an unequal spatial distribution of the high value-added activities (i.e., those activities that can generate “good jobs”), which collides with the tendency towards an equalization of the workers’ education levels and aspirations that is underway worldwide; in addition, as a result of both the technological progress and the composition of the world demand for goods and services, the volume of medium value-added activities (i.e., those activities that can generate decently paid jobs) is scarce worldwide relatively to the increasing number of people who qualify for these jobs and aspire to them. As previously discussed, rigidities and distortions due to government policies have played some role in exacerbating these discrepancies, which in the developing world pushes many young people with some education to emigrate, while in Southern Europe have their more visible manifestation in the extremely large fraction of native young people who are unemployed or prefer to stay out of the labor market (in areas where the presence of foreign immigrants employed in low-productive activities is not negligible).

In the rich world, underutilized human and non-human resources are concentrated in poorly competitive areas. An argument that is often raised by pundits and commentators is that the depressed areas located in the rich world cannot compete in terms of costs with the emerging economies, but should upgrade the technological and quality content of their products, thus increasing their overall productivity. However, this is exactly what nowadays many emerging economies are trying to do by investing heavily in human capital and R&D so as to escape the so-called “medium-income trap”: they are not any longer scarce in skilled workers and advanced technologies. Moreover, such an upgrade is not possible without the capacity to attract competitive firms and to favor their development. State interventions are essential to provide basic public goods—like law enforcement,
property rights protection and quality education—that are often in short supply in these areas, as well as to offer favorable tax treatments that may at least partially counterbalance the unfavorable socio-economic environment where firms have to operate. Nevertheless, these interventions cannot substitute for the need to ensure a cost structure that may offset the comparative disadvantages of these low-competitive areas and induce competitive firms to locate in their territory. If the structural features that constrain long-run growth in these areas are not properly tackled, expansionary fiscal policy boosting their local demand cannot but amplify their external imbalances.

7. Conclusions

In the two decades that preceded the global financial crisis, hundreds of millions of people living in Asia and previously consigned to low-productive activities out of the world economic circuit found jobs in modern industries producing for the global markets. This epochal shift amounted to an unprecedented supply-side shock for the world economy. It led to big displacements of manufacturing productions—and to a minor extent of some services—that moved from the advanced economies to the emerging economies, to large increases in the advanced economies’ import of manufactured goods and low-cost services produced in the emerging economies, to the rapid increment in the global demand for energy and (industrial and agricultural) commodities due to the fast economic growth taking place in these emerging countries (with great benefit for the net exporters of energy and commodities), to the possibility for the rich countries to have access to the excess savings generated by the emerging economies. As we have seen, the impact of this huge shock on the advanced economies has not been symmetric. On the whole, this shock led to an acceleration of world economic growth, but also to a widening of the external imbalances of various economies, amplified by the Chinese authorities through their use of non-market instruments aimed at manipulating the yuan’s exchange rate and keeping China’s rate of capital accumulation at a very high level.

For Europe, the transition of the former Soviet bloc to a market economy was another asymmetrical shock, with low-cost labor Eastern Europe becoming an offshoring destination mainly for Northern
and Central Europe, and consequently with Southern Europe becoming less attractive for low-cost productions. The impact of this shock was intertwined with the effects of the adoption of the euro, which brought about the possibility for the peripheral countries of the Eurozone to borrow from abroad at rates much lower than before. This possibility allowed these countries to expand their domestic demand, thus feeding a growth process that appeared unsustainable only when the Greek crisis erupted. During this process, indeed, the nominal rigidity introduced with the adoption of the euro on the part of countries characterized by divergent prices, wages and productivity paths translated into growing real exchange-rate differentials and competitiveness gaps. Hence, the consequent trade imbalances internal to the Eurozone paralleled the global imbalances involving the U.S. and the emerging countries.

Nowadays, the big supply-side shocks that hit the world economy in the last 25 years appear to have exhausted almost entirely their driving force, and it is not visible some other impulse of comparable strength that may replace them. In particular, China has entered a new phase of its development, and some of the favorable factors driving its exceptional growth performance are fading away, starting from the demographic dividend that it enjoyed in the recent past. China’s economic growth will increasingly depend on its ability to achieve efficiency improvements and to move capital and labor inputs away from mature industries toward new higher value-added activities. Its growth rate will be further decline. There is no area in the developing world with a population comparable in size to China that can repeat a similar growth performance in the predictable future. Especially in the African and Latin American countries, it is hard to set the conditions for a “developmental state” of the type that we have seen in the high-performing East Asian economies, namely an authoritative and effective political power—with command over all institutional levers and pervasive control over the society—capable to mobilize the available resources and energies for boosting economic growth. In addition, considering the current state of the global economy and the predictable evolution of technology, it is unlikely that the economic take off of large areas of the world can still be based on
that export-led model hinging on manufacturing production which has been successfully followed by China and other East Asian countries.

In the next future, the rich countries will face the global scenario outlined above. Now spreading within them are behaviors and attitudes that depress long-run growth. Some of them have already been mentioned: the preference to invest in consumer durables of better quality, e.g. more comfortable and spacious dwellings or ones in pleasant surroundings, rather than in productive assets; a reluctance to accept any job whatever by the large mass of young people with medium-high qualifications amid a structural tendency towards a polarization of the labor market, implying that a large fraction of the new jobs are created in the large and growing sector of personal services characterized by low value added and poor technological content. These trends appear to be hardly reversible, in that they reflect structural forces and deep-lying aspirations of most people around the world. Other attitudes that are not growth-friendly, but which have spread throughout the West as a result of a long period of rapid increase in living standards and wealth, as well as of changes in culture and social norms, include the widespread resistance to prolongation of working life as longevity increases, or the propensity to invest much more time and resources compared with previous generations in each individual child, thereby reducing the number to below the threshold that ensures invariance of the population. All this seems to indicate that the deep changes in habits and behaviors that would be necessary to revive economic growth are perceived as undesirable by most people living in the rich countries. At the same time, however, most of the inhabitants of the developed world appear to be unwilling to forgo the benefits that robust growth can bring in terms of increased private and public consumption, more social protection or access to ever more sophisticated and costly health care. In other words, the demand for economic growth remains buoyant even in the advanced economies. Moreover, for a country with a recent history of relatively high standards of living, the transition to a permanent state of semi-stagnation entails a painful curtailment of aspirations and expectations, with inevitable repercussions in terms of social tensions, frustration and discontent especially among those belonging to groups at risk of social downgrading. It is undeniable, therefore, that there is a trade-off between
the aspirations for an ever-increasing level of private and collective consumption, on the one hand, and maintaining lifestyles, levels of social protection, and rent positions that are growth-depressing, on the other. The existence of this trade-off tends to be ignored in the public discourse, determining a sort of collective schizophrenia in the ways in which these themes are treated, and this paper interprets some of the policies implemented in developed countries since the growth of the first decades after World War II began to slow down—i.e., since the 1970s—as attempts to evade it.

Even policies to mitigate the impact on growth of the structural trends mentioned above are not without their drawbacks. For example, encouraging immigration to remedy the low birth rate of the rich world exacerbates the congestion of peripheral urban areas and creates difficult problems of integration and co-existence. Moreover, especially in countries like those of Southern Europe—where the demand for skilled workers is low, the labor market is typically dualistic, and the underground economy is relatively extensive—the great majority of immigrants take jobs with low or very low value added mostly in the informal service economy, but also in agriculture and construction. This probably partly explains the poor productivity growth recorded by the countries of the southern periphery of the Eurozone precisely in the years when immigration was intensifying. Thus, it does not apply to these countries the argument that is customary to raise for emphasizing the benefits of immigration for the advanced economies, namely that it makes up for shortages of workers with particular skills and knowledge. Hence, in the light of this recent experience, it is unlikely that immigration will be able to persistently increase the growth rate of per capita income in these countries; rather, it will tend to reduce it. Similarly, it is legitimate to doubt that the policies currently implemented to raise the fertility rate in the countries displaying birth rates below the threshold that allows replacement of the population will have significant effects. In particular, this applies to the countries of Southern Europe, deemed to have a strong familist ethos but exhibiting the lowest birth rates of the world, as long as the chronic malfunctioning of their labor markets and welfare systems will persist.
As well known, to predict technological revolutions and breakthrough innovations is an exercise bound to fail. As far as we can see, it does not seem likely that some of them are forthcoming. The prevailing opinion among experts is that a breakthrough technology of epochal significance, that is the use of nuclear fusion for the generation of practically unlimited quantity of energy at low cost, in safe conditions and minimal environmental impact, will be available not earlier than in the 2030s. This means that in the next future, productivity growth in the economies at the technological frontier will continue to be slow.

Slowing productivity growth in the most advanced economies—such as the United States—is certainly a bad news for the world longer-term economic prospects. However, at the present time it is more important for reviving economic growth to succeed in activating the ample underused assets (especially idle human resources) existing in large areas within the rich world, surely in Southern Europe. The existence of these slack resources is explained in the paper as the effect of two colliding tendencies: the tendency of the competitiveness imbalances among countries and regions to be wide and persistent, which determines an unequal spatial distribution of the high value-added activities (i.e., those activities that can generate “good jobs”), and the tendency towards an equalization of the workers’ education levels and aspirations that is underway worldwide (in particular, in the rich world). We claim that rigidities and distortions due to government policies have played some role in making these discrepancies worse, which in the developing world pushes many young people with some education to emigrate, while in Southern Europe have their more visible manifestation in the extremely large fraction of native young people who are unemployed or prefer to stay out of the labor market (in areas where the presence of foreign immigrants employed in low-productive activities is not negligible). In the face of these structural imbalances, we argue that expansionary fiscal stimuli—that are often advocated as the appropriate policy response to the current anemic growth—are shortcuts that do not tackle the problem, but have counterproductive effects.

One could wonder why the fiscal expansion prescription to relaunch economic growth and reduce unemployment in Europe is increasingly popular among market practitioners, politicians and
economists, especially considering that entrenched competitiveness gaps have probably been the main driver of the Eurozone’s crisis and the main reason for which the post-crisis recovery has been so stunted in the Southern European countries. One may understand that, in these countries, firms producing for the domestic market perceive to be demand constrained and invoke any kind of policy measure that boosts domestic demand, neglecting the systemic constraints that make these policies unsustainable and counterproductive in a longer-term perspective. It is also easy to grasp the motivations of the politicians who are inclined to prefer policies delivering short-term benefits for their constituency and to avoid unpopular structural interventions. Finally, one may think that the economists supporting generalized fiscal stimuli are convinced that what was appropriate for the late 1930s’ United States works also for the globalized advanced economies of the 21th century.

There is some evidence that the composition of the global demand for goods and services, together with the technological developments underway, tend worldwide to polarize labor demand between a relatively small share of well-paid jobs for high-skilled workers and a majority of routine occupations. This is determining a fierce competition among countries and regions—both in the advanced economies and in the emerging countries—for attracting and retaining high valued added activities, that are skill-intensive in nature: the “wealth of nations”, namely the standard of living of the inhabitants of a certain territory, depends ultimately on this capacity, which is distributed unequally across different areas. At the same time, a strong tendency is at work worldwide towards an equalization in education levels and aspirations of the young workforce. The tension between such a tendency and the polarization of the labor market creates frustration and anger among those who aspire unsuccessfully to find better occupations.

Another source of increasing wealth and income inequality in the advanced economies has been the rising prices of real and financial assets. In this paper, we have also argued that this rise has depressed long-run growth. More specifically, we have claimed that the support guaranteed by the monetary authorities to the prices of financial assets through their ultra-expansionary policies avoids massive defaults but crowds out investment in productive assets, since it raises the expected rate of
return that the latter have to offer in order to match the rate of return that financial assets are expected to offer thanks to the central banks’ interventions. Similarly, we have discussed the hypothesis that the rising urban rents, prices of residential land and house prices have not only led to widening wealth and income inequalities, but have also squeezed profits and wage, as well as crowded out investment in productive assets. Hence, both efficiency and equity considerations do not justify the private appropriation of the economic rents generated by the growing value of these non-productive assets.

REFERENCES


FIGURES AND TABLES

FIGURE 1 GDP and Labor Productivity Trend Growth in advanced economies*
(In percent; purchasing power parity weighted)

* H. spread EA stands for Eurozone countries with high borrowing spreads (Eurozone periphery).
Source: Dabla-Norris et al. (2015).
FIGURE 2 Indices of prices of residential land, of house prices and of replacement costs in the USA (1970=1)

Source: Davis and Heathcote (2004).

FIGURE 3 House price indices (advanced economies)*

*Full sample=100. Figures are CPI-deflated and seasonally adjusted.

Source: Scatigna et al. (2014).
FIGURE 4 Housing wealth/domestic income (at factor prices) ratios, 1970-2010

Source: Rognlie (2014).

FIGURE 5 Domestic wealth excluding housing/domestic income (at factor prices) ratios, 1970-2010

Source: Rognlie (2014).
FIGURE 6 Net domestic capital income excluding housing/domestic income (at factor prices) ratios, 1960-2010

Source: Rognlie (2014).

FIGURE 7 Net housing wealth income/factor price domestic income (at factor prices) ratios, 1960-2010

Source: Rognlie (2014).
FIGURE 8 Net Capital Income as Shares of Total Private Domestic Value Added in the U.S., Canada, Germany, France, U.K., Italy and Japan, 1948-2010*

* U.S., France and U.K. data cover full period; Japan data starts in 1955, Canada in 1960, Italy in 1990, Germany 1991. For Canada and Japan, the residential housing sector is the owner-occupied housing sector due to data limitations. For all other countries, it covers all housing. This is the unweighted average of shares across all seven countries. To control for the changing composition of the sample, it displays time fixed effects from a panel regression, normalized to equal the actual average at the start of the sample.
Source: www.brookings.edu/bpea-articles/deciphering-the-fall-and-rise-in-the-net-capital-share
Figure 9 Home ownership rates in advanced economies, mid 1960s-2004*

*Nordics includes Denmark, Norway, Sweden and Finland; English-speaking includes Australia, Canada, the United Kingdom, the United States and Ireland; Continental European includes Austria, Belgium, France, Germany, the Netherlands, Switzerland and Luxembourg; Southern European includes Greece, Spain and Italy; Central/Eastern includes Hungary, Poland and the Russian Federation. The homeownership rates in each group refer to the simple average of the rate in individual countries.

Source: Andrews et al. (2011).
FIGURE 10 Ratio between the price of investment goods and the price of consumer goods

FIGURE 11 Total tax rate on companies (% of commercial profits) in 2014, EU & EFTA countries*

* It includes all mandatory taxes and contributions that a medium-size company must pay in a given year: profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, property transfer taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes, vehicle and road taxes, and other small taxes or fees.
FIGURE 12 Excess desired saving and zero lower bound

Interest rate

Desired investment at full employment

Desired savings at full employment

Investment, Savings
FIGURE 13 Eurozone: Investment by sector, % of GDP*

* HH= households, GG=general government and C= corporate sector.
Source: Gros (2014).

FIGURE 14 Capital-output ratio estimates: Eurozone (EA) and United States (US)*

* Capital is assumed to depreciate at 6% per year. Output is measured as potential GDP (based on IMF data).
Source: Gros (2014).
FIGURE 15 Employment rates of 20-64 years old, 2014*

* Females and males; Green: Females; Yellow: Target Europe 2000; Blue: Target PRN Italy.
Source: SVIMEZ 2015.

FIGURE 16 Not (engaged) in Education, Employment or Training (NEET), 15-34 years old, 2014*

* Females and males; Green: Females.
Source: SVIMEZ 2015.
Table 1 Wealth per household in 2010. Medians (in thousand of euro) and % of households

Standard errors are reported below the figures which they refer to

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