In the continuing stagnation of European economies, the persistence of inadequate demand plays a crucial role that deserves greater attention. First and foremost, we are in a context of slower international growth, in which global world trade is growing more slowly than global GDP. This implies that exports are not in the position to be the driver of renewed growth for Europe. Private consumption has suffered from stagnating growth and from the rise in inequality that has compressed lower incomes. Public expenditure has been reduced or contained by the austerity measures required by current European policies, further lowering its expansionary potential for the economy. Investment – that is by definition pro-cyclical – has failed to return to growth. This worrying situation, which extends well beyond Europe, has been aptly summarised by the title of the most recent IMF World Economic Outlook: “Subdued Demand. Symptoms and Remedies”.¹

The focus of this article is on the lack of investment and on the important role that a public investment plan on a European scale could play in ending the long European economic stagnation.

**Europe’s missing investment**

Table 1 summarises the fall of investment in selected eurozone countries. Between 2008 and 2015, total investment as a share of GDP fell from 23% to 19.8% in the eurozone as a whole, ranging from a modest reduction in Germany to major losses of 4.6 percentage points in Italy and 9.5 points in Spain.

The fall has been particularly serious for public investment, as the pressure for cutting public expenditure has often led to greater cuts in long-term capital spending – that could sometimes be postponed – as opposed to current spending for providing everyday services and transfers. Table 2 shows the change in public investment from 2008 to 2015 for the same countries. For the eurozone as a whole, the reduction amounted to -11%, resulting from significant increases in Germany (+24%), moderate reductions in countries such as France (-4%) and major falls in Southern European countries (-23% in Italy and -48% in Spain).

Broader evidence on such reductions in public investment has emerged from most advanced countries; the IMF in its 2014 World Economic Outlook documented in detail this long-term pattern, showing that for advanced economies the share of GDP devoted to public investment fell from about four per cent of GDP in 1992 to three per cent in 2011.²

Major policy initiatives and statements have addressed this issue. For example, the final document of the 2014 G20 summit in Brisbane declared that [t]ackling global investment and infrastructure shortfalls is crucial to lifting growth, job creation and productivity. We endorse the Global Infrastructure Initiative, a multi-year work programme to lift quality public and private infrastructure investment. Our growth strategies contain major investment initiatives, including actions to strengthen public investment and improve our domestic investment and financing climate, which is essential to attract new private sector finance for investment.³

As a follow up, the OECD prepared a detailed documentation of G20 government investment strategies, addressing both public capital spending plans and support to private investment, documenting the policy relevance of such actions, and estimating a significant impact on GDP growth.⁴ Finally, the 2015 G20 summit in Antalya produced a statement arguing that we have developed ambitious country-specific investment strategies, which bring together concrete policies and actions to improve the investment ecosystem, foster efficient and quality infrastructure, including by

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¹ See IMF: World Economic Outlook, Subdued Demand: Symptoms and Remedies, October 2016.

² See figure 3.2 in IMF: World Economic Outlook, Legacies, Clouds, Uncertainties, October 2014, p. 80.

³ G20 Leaders’ Communiqué, Brisbane Summit, 15-16 November 2014.

the public sector, support small and medium sized enterprises (SMEs), and enhance knowledge sharing.  

Focusing on the need for public investment, the 2014 IMF report investigated in detail the potential of a major effort in developing infrastructures and considered the possible forms of financing. The conclusions were that evidence from advanced economies suggests that an increase in public investment that is debt financed could have larger output effects than one that is budget neutral, with both options delivering similar declines in the public-debt-to-GDP ratio. … During periods of low growth, a public investment spending shock increases the level of output by one and a half per cent in the same year and by three per cent in the medium term.  

“Improvements in fiscal institutions and some fiscal rules could help protect public investment during periods of fiscal consolidation.” This is followed by an explicit reference to fiscal austerity rules and to the proposal of a “golden rule” that could exclude investment spending from them.

**The need for a golden rule for public investment in Europe**

European fiscal rules, from the Maastricht Treaty to the Fiscal Compact, have been a major driver of the fall in public investment. In recent years, modest openings have emerged in this regard. The first one is the “investment clause”, concerning the opportunity to exclude investments for co-financed public investments from the deficit-to-GDP ratio. The “investment clause” was introduced in 2012, allowing temporary deviations from the structural deficit path linked to the realisation of “projects co-funded by the EU under the Structural and Cohesion policy, Trans-European Networks or Connecting Europe Facility with a positive, direct and verifiable long-term budgetary effect”. However, its use was associated with restrictive conditions, and its implementation has been limited. Slightly revised conditions for using the “investment clause” have recently been introduced which also take into consideration the business cycle context faced by member countries.

An important debate has emerged on the introduction of a golden rule that excludes public investment from the restrictions on public deficits. The argument is that public investment will mainly benefit future generations, and it is therefore reasonable to fund it not through tax receipts but through public debt. Moreover, current cuts in public investment are detrimental to future economic growth, with possible negative effects on future wellbeing and fiscal budgets. A specific proposal for a golden rule that excludes (some) public investment from deficit calculations has been developed by Achim Truger. The activities that could be exempted from deficit restrictions could include investments that are growth-enhancing, including infrastructure projects, investments in education and train-

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5 G20 Leaders’ Communiqué, Antalya Summit, 15-16 November 2015.

6 IMF: World Economic Outlook, Legacies …, op. cit., pp. 82, 89; see in particular Chapter 3, “Is it time for an infrastructure push?”, where detailed estimates of the macroeconomic impact of such actions are provided.

7 Ibid., p. 77.


ing, R&D, and human capital, as well as intangible investments (innovation, patents, software). Such a golden rule could be introduced without a change in the EU treaties. However, by itself the rule would be unable to trigger significant new expenditure and would therefore need to be complemented by a large investment plan.\textsuperscript{10}

A parallel proposal by Karl Aiginger concerns the extension of the built-in flexibility of the current fiscal pact with a “silver rule” for investments. When structural reforms are undertaken, member countries could be allowed to spend more than what is allowed by the Fiscal Pact for debt-financed investments that are relevant for long-term growth and for slowing down climate change.\textsuperscript{11}

The adoption of a golden rule would allow a significant reduction of austerity in public budgets and would tackle the issue of demand shortage. In the short-term, a significant extension of “flexibility” in the calculation of allowed budget deficits for EU countries could represent the most immediate possibility for countercyclical fiscal policy supporting domestic demand. A relaxation of fiscal rules limited to investment expenditure could be a reasonable and effective way to implement a much needed policy change.

\textbf{The economic debate}

Several economists have contributed to the debate on the need for greater public investment in advanced countries. In the United States, Lawrence Summers has repeatedly argued for such actions, and in a recent article he points out that

there is a consensus that the US should substantially raise its level of infrastructure investment. Economists and politicians of all persuasions recognise that this can create quality jobs and provide economic stimulus without posing the risks of easy-money policies in the short run.\textsuperscript{12}

His rough estimate of the needed increase in investment is about one per cent of GDP. Over a decade, this would amount to $2.2 trillion for the US.

The funding of such capital expenditure is often problematic for countries. Summers argues, however, that

infrastructure investments pay for themselves by expanding the economy and increasing the tax base. The McKinsey Global Institute has estimated a 20% rate of return. If it is only 6% and the government collects about 25 cents on every dollar of GDP, it will earn 1.5% on investments, more than the real cost of borrowing over a horizon of 30 years. Debt financing of new infrastructure investment would be entirely reasonable.\textsuperscript{13}

This is particularly true given the present conditions of financial markets, where “government borrowing costs are much lower than the returns demanded by private-sector investors”.\textsuperscript{14}

Similar arguments have been put forward by Alberto Quadrio Curzio with regard to international trends and European problems.\textsuperscript{15} A more specific discussion of possible ways of financing public investment in Europe has included various proposals to introduce Eurobonds.\textsuperscript{16}

In spite of this large consensus in identifying the closing of gaps in investment as a major policy priority, modest action has been taken, and the expected contribution of higher investment to growth has failed to materialise – especially in Europe.

\textbf{Juncker’s Investment Plan for Europe}

In late 2014, the growing realisation that Europe needed a comprehensive solution to the ongoing economic crisis led the European Commission President Jean-Claude Juncker to launch the “Investment Plan for Europe”, with the aim of supporting public and private investment. In 2015 the European Fund for Strategic Investments (EFSI) was created and “located” within the European Investment Bank (EIB). EFSI is expected to fund new investment projects of up to €315 billion. EU funds are providing €8 billion, the EU guarantee on the projects is expected to bring in an additional €8 billion and €5 billion have come from EIB funds. This total of €21 billion is expected to mobilise private funds of an amount 15 times greater, relying

\begin{footnotesize}
\textsuperscript{10} Ibid.
\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid.
\end{footnotesize}
on a huge leverage effect in financial markets that assume guaranteed returns on investment.

EFSI is expected to fund investments in infrastructure and innovation; it also provides finance for small and medium-sized enterprises (SMEs) – with a role for the EIB’s European Investment Fund. By spring 2015, member states had proposed 1,300 projects costing a total of €2 trillion, reflecting the large need for public investment throughout the EU.

Since its inception, several criticisms have been directed at the Juncker Plan and EFSI. First, the EU resources available are limited and consist of a repackaging of resources from previous EU programmes, relying on a huge leverage effect in financial markets. Second, there is an imbalance between private and public interests; private investors have guaranteed returns in low-risk activities, while public-interest projects may have to generate greater income (paid by users) than in the case of traditional public investment. In fact, projects funded exclusively by public agencies are excluded from the plan. Third, it envisages a collection of disparate investment projects without no public authority providing a framework strategy and coordinating the projects; this may allow large oligopolistic firms to expand their market power and their involvement in public interest activities. Finally, the plan does not set specific guidelines on the location of planned investment. While investment is most needed in the “periphery” countries hardest hit by the crisis, there is a risk that richer countries may fund projects in their own economies only, enhancing – rather than reducing – the divergence in economic performances within Europe.

The creation of EFSI and the role assumed by the EIB in managing it – including the European Investment Fund for investing in SMEs – has opened up an important policy space for the possibility of a European investment plan and for a broader industrial policy. For the first time, there is an EU-level programme that can obtain resources to attract private financial resources that have been left idle.

As some time has passed since its initiation, it is now possible to assess some of the Juncker Plan’s achievements and the lessons for a broader investment plan in Europe. A first study on its macroeconomic effect was carried out by the French Economic Observatory, with a rather explicit title: “Probably too little, certainly too late”. The paper develops a simulation of the plan’s economic impact using a DSGE model of Europe’s economy and finds that “had the Juncker plan been implemented in a timely manner, it would have helped to significantly shorten the recession”. It concludes that “EU authorities should have implemented a much bolder plan. As it is, the Juncker plan is likely not going to be effective at all.”

A second study on the content of the projects EFSI financed has been carried out by the think tank Bruegel. The authors examined the available projects and compared them to the ones that have been funded by the standard activities of the EIB. They find little additionality and little novelty in the projects funded so far and suggest that “EFSI should only be used for really innovative and risky projects that cannot find funding at the moment because of market failures”. According to this perspective, the EIB should increase its share of capital in high-risk projects and lower its participation in lower-risk projects that could more easily find private financing.

Greater resources and more focused initiatives are therefore required in order to introduce an effective policy for addressing Europe’s investment gap. The European Commission has realised the importance of further action in this direction and recently announced novel measures. In particular,

the Commission is committed to doubling the EFSI, in terms of duration and financial capacity … [with] a legal extension that would bring the initial three-year period (2015–2018) with a target of EUR 315 billion to at least half a trillion euro investments by 2020, the end of the current Multiannual Financial Framework.

\begin{footnote}{
19 Ibid.
21 Ibid.
22 European Commission: Press release, State of the Union 2016: Strengthening European Investments for jobs and growth, Strasbourg, 14 September 2016.\end{footnote}
Future projects are expected to increase their “additional-ity” compared to current investment activities and to devote more attention to the environmental targets Europe has set in the COP21 climate agreement. In addition, the Commission wants to introduce a European External Investment Plan “to encourage investment in Africa and the EU Neighbourhood to strengthen our partnerships and contribute to achieve the Sustainable Development Goals”.23

It remains to be seen whether this extension of EFSI will be significant enough to have an impact in macroeconomic terms – helping restart growth in Europe – and to reshape public investment in the direction of greater sustainability.

Public investment and industrial policy

In fact, public investment is important for reasons that go beyond its impact on the demand side of the economy, in terms of supporting aggregate growth. It is even more important due to its role in creating infrastructures and public capital that make it possible for new economic activities to develop. The experience of the 2008 crisis and the current stagnation has reminded economists and policy makers that markets alone cannot be relied upon to make correct investment decisions – in fact, the financial crisis resulted from major mistakes in financial markets.

Therefore, public policy – and particularly public investment and infrastructure – has the crucial role of targeting new fields whose development is desirable in economic and social terms, i.e. with knowledge-intensive, high-productivity, high-skill, high-wage activities, as well as in environmental terms, i.e. reducing climate change and improving sustainability. The role of public investment includes the provision of infrastructures and activities that have the nature of public goods and cannot reasonably be provided by private firms as well as the creation of the appropriate context – including knowledge and research, institutions and regulations, initial demand, etc. – for the successful emergence of new private activities.24

In this regard, the debate on public investment should be closely associated with the renewed interest in Europe for industrial policy. A special issue of Intereconomics addressed such a question in 2015, mapping the terms of the current debate.25 Additionally, an in-depth discussion has analysed Italy in a comparative perspective, documenting the importance of industrial and investment policy in Southern European countries, where industrial production is still 20% below pre-crisis levels.26 A comprehensive study has also examined the policy space for such initiatives in Europe.27

In the light of such debates, it would be important to shape the extension of EFSI in the direction of investments whose public good nature is particularly relevant (avoiding overlapping with ordinary investment activities) and whose potential for innovation is greater (necessarily involving a greater risk). In this view, specific activities that could be targeted include:

**Environment and energy:** The technological paradigm of the future should be based on “green” products, processes and social organisations that require entirely new public infrastructures, making it possible to use less energy, resources and land; to have a much lighter impact on the climate and eco-systems; and to transition to renewable energy sources and integrated mobility systems.

**Knowledge and ICTs:** The current ICT-based paradigm has a potential for wider applications requiring the diffusion of advanced infrastructures – starting with broadband networks – and the creation of “platforms” for the provision of network-based services that have to maintain an open (and public) nature, avoiding the monopolistic power of dominant firms.

**Health and welfare:** Europe is an ageing continent with the best health systems in the world, rooted in their nature as public service provided outside the market. Public investment and infrastructures are sorely needed to maintain the current level of public services and to make it possible that advances in care systems, instrumentation, biotechnologies, genetics and drug research can develop in a carefully regulated way.

23 Ibid.
25 M. Mazzucato et al., op. cit.
26 A recent special issue of Economia e Politica Industriale is devoted to perspectives on industrial policies in Italy and in Europe; see in particular M. Lucchesi, L. Nascia, M. Pianta: Industrial policy and technology in Italy, in: Economia e Politica Industriale – Journal of Industrial and Business Economics, Vol. 43, No. 3, 2016, pp. 233-260. Eleven additional contributions to this special issue by European experts provide a comprehensive comparison between Italy and the experiences of other countries.
Finally, this policy direction is coherent with many of the targets of the Europe2020 strategy. Greater cohesion could also be assured by a concentration of such public investment in the weaker countries and in the weaker regions of all countries, reducing in this way the dangerous divergence that has emerged between Europe’s centre and periphery.

A large European public investment plan could in fact address a large number of European problems we face – macroeconomic stagnation, industrial decline, ageing infrastructure, technological change and lower cohesion – with a novel approach and effective policy tools.

28 Ibid.