September 2015

The Investment Slowdown in the European Union



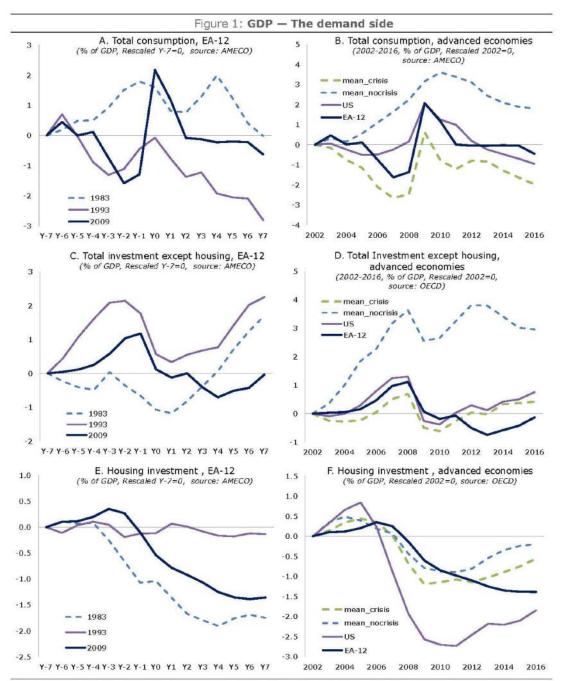
The lingering weak growth across the European Union is associated with a continued stagnation in non-residential investments. This contrasts sharply with the normal recovery of household consumption and an atypically strong upward trend in exports in the post-crisis period. Investment remains comparatively weak when matched with previous cycles and also in contrast to rebounds in other developed economies. Non-residential investment has failed to strengthen significantly from the lows of the crisis and, both in levels and in proportion to GNP, has only now approached pre-crisis magnitudes. Initially during the financial crisis investment fell in step with other developed economies facing banking crises but the recovery in the European Union was differentially impacted by the emergence of the sovereign debt crisis.

Figure 1 gives the comparative demand-side data for consumption, non-residential investment, and housing investment. The left-side panel looks at Euro Area 12 (EA12) figures as percentages of GDP over the years surrounding the 1983, 1993, and 2009 downturns. The right-side panel looks at EA12 figures in comparison to the United States and clustered 'crisis' and 'nocrisis' countries (see footnote for Figure 1 for definition of banking 'crisis' and 'nocrisis' developed countries).

The dynamics of consumption, as a percentage of GDP, over the period surrounding the 2009 financial crisis is compared to prior recessions centered on 1983 and 1993 in the upper-left panel of *Figure 1*. We see a much steeper run-up in consumption just prior to the 2009 crisis, followed by a larger drop, and then a quick return to stability. In comparison to the consumption patterns of other advanced economies around the 2009 crisis shown in the upper-right panel of *Figure 1*, the EA12 saw a more rapid and deeper decline and upswing than in the United States but with a more rapid return to stability. Both of these comparisons show a weaker EA12 household consumption pattern in the run-up to the crisis but a shorter period of post-crisis adjustment. Both of these patterns are consistent with the EA12 demonstrating less severe balance-sheet adjustments by the household sector.

The dynamics of the recent housing crisis are demonstrated in the lower panels of *Figure 1*. The relative performance of EA12 housing investment as a percentage of GDP is contrasted with the previous downturns of 1983 and 1993 in the lower-left panel. The lower-right panel gives the comparison of EA12 housing investment compared with other countries' housing sector during the years surrounding the 2009 crisis. We can clearly see the severity of the downturn in housing investment during the recent crisis but note that it is of a lesser magnitude relative to GDP than was the fall in housing investment around the 1983 crisis. The cross country comparison of the 2009 crisis shows how much more severe the housing investment collapse was in the United States. This panel also shows the beginning of a U.S.-based housing recovery, as opposed to the EA12 continued decline, in the post-2011 sovereign debt crisis period.





YO is the year of cyclical trough in the euro area, i.e. 1983, 1993 and 2009. 2009 is also the year when most advanced economies started to recover from the global financial crisis. For the recovery after 2009, Y6 (2015) and Y7 (2016) are based on the European Commission's Spring Forecasts. EA12 is GDP-weighted aggregate of BE, DE, IE, EL, ES, FR, IT, LU, NL, AT, PT, 'mean_crisis' is the un-weighted mean of CH, JP, SE, UK, US. 'mean_nocrisis' is the un-weighted mean of AU, CA, KO, NO, NZ. The ratios in the graphs have been rescaled to be equal to 0 in Y-7/2002.

**Source: page 9 in European Commission (2015): data from AMECO, OECD.

But the middle panels of *Figure 1* show the most strident contrast in demand components between the EA12 and other advanced economies. In the historical comparison in the middle-left panel we see that EA12 non-residential investment, as a percentage of GDP, saw a smaller decline than during the 1993 crisis but has seen continued stagnation without the recoveries shown in both the 1983 and 1993 downturns. Only in 2016 is non-residential investment forecasted to return to where it was at the bottom of the crisis trough in 2009. Likewise the middle-right panel shows that non-residential investment in 'mean crisis' and 'mean nocrisis' countries and the United States has been restored, while it continues to lag below the trough level in the EA12.

Extensive empirically-based analysis has been performed to disentangle alternative explanations for this atypical recovery cycle in non-residential investment. Macroeconomic modeling focused on accelerator models with interactions between aggregate demand and investment adjustments have been explored. Other studies have taken a microeconomic modeling approach using firm-level data to examine the determinants of the comparative return on equity (ROE) for investments and the alternative costs of funding either via retained earnings or issuing debt.

A general summary of the macroeconomic modeling findings are as follows.¹ Most of the decline in non-residential investment has been associated with the significant decline and continued weakness of aggregate demand, both domestic and foreign. This simply means that business firms are not investing in new plant and equipment because there is insufficient demand to justify the cost. Likewise, looking into the future there is continued uncertainty about when sufficient demand growth will be realized to justify a precautionary expansion of productive capacity. Given the continued governmental financing restraint placed on Euro Zone members, a significant boost in macroeconomic fiscal stimulus is unlikely. In fact the increasing concern is the slowing growth in emerging market economies which may produce more unbalanced growth along with a reduced likelihood for export expansion.

This most important general result should be viewed within the context of several complicating factors, both globally and within the confines of the European Union. With the growing importance of global value chains (GVCs) and multinational enterprises (MNEs) several trends have emerged. Portions of domestic non-residential investment have been shifted away from advanced economies but it is still an unsettled question as to whether domestic or foreign capital investments are complements or substitutes. Within advanced economies a continued shift away from investment intensive industrial sectors toward less investment intensive service sectors has occurred. This has boosted information and communications technologies, or their embodiment in intangible and

¹ For a comprehensive overview of the macroeconomic modeling of non-residential investment see OECD (2015a).

knowledge-based investment. These types of investments have more rapid rates of depreciation, based on rapid technological obsolescence, and have distributional implications reflecting global patterns of specialization in production. In general, the shift toward knowledge-based investments have favored the most advanced economies.

With the European Union's over-reliance on monetary, as opposed to fiscal, policy stimulus we have proved ineffectual in stimulating non-residential investment. The falling real after-tax finance costs have seen only very marginal effects on real investment. The pass through to financial investments, reflected in high equity prices, has been much more direct and stimulative. A more important factor resulting from essential banking sector balance sheet strengthening has produced pockets of credit constraint.

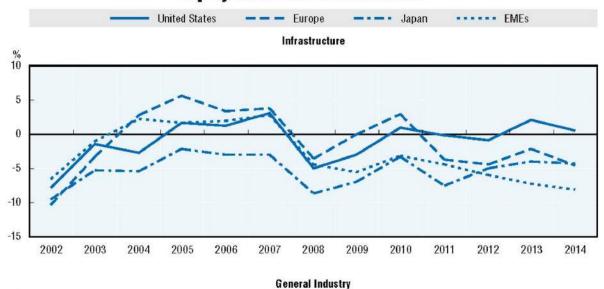
These effects have been more completely analyzed with microeconomic firm-level data. A comprehensive look at the interactions between firm finances and investment opportunities using 10,000 of the largest global companies is documented in a recent OECD study.² A major trend reflected across the landscape where these firm operate is increased scrutiny of the profitable strategies associated with transfers of intellectual property within GVCs. This has entailed directing large investments to emerging market economies. This focus on increased operating efficiencies has also been directed in conjunction with complex tax strategies.

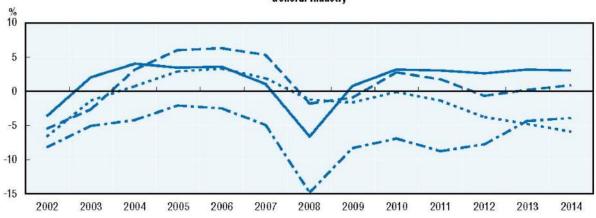
The trend has been to realize lower ROE and see squeezed profit margins among large companies in emerging markets and Europe as a result of diminished productivity growth and over-investment in general industrial sectors in emerging markets. *Figure 2* shows the resulting value-creation gap by looking at the difference between firms' ROE and the cost of equity. Among larger firms in advanced economies the major source of funding for investment is retained earnings, i.e., these firms finance most of their investment from net income. Thus the cost of equity represents the opportunity cost of funding investment. Thus if the firm's cost of equity exceeds its ROE the company would make its stockholders better off by paying dividends or making share repurchases to pay out cash to the owners rather than retain the funds by making new investments.

The top panel of *Figure 2* shows that in the infrastructure sector the value-creation gap has been diminishing in most regions, remaining only slightly positive in the United States. Europe's gap has been declining and is now close to that of Japan, the advanced economy with a problem of chronic over-investment in infrastructure. In the bottom panel we see that Europe, compared to the United States, was in a more profitable investment position in the run-up to the 2009 crisis. While the United States saw a bigger drop during the crisis into the negative range for the value-creation gap, the recovery was stronger and remains so for U.S. investment. The European recovered but was sent back down during the sovereign debt crisis and has failed to rebound since.

² See details in OECD (2015b).

Figure 2. The value-creation gap: Negative returns on equity minus the cost of equity outside the United States





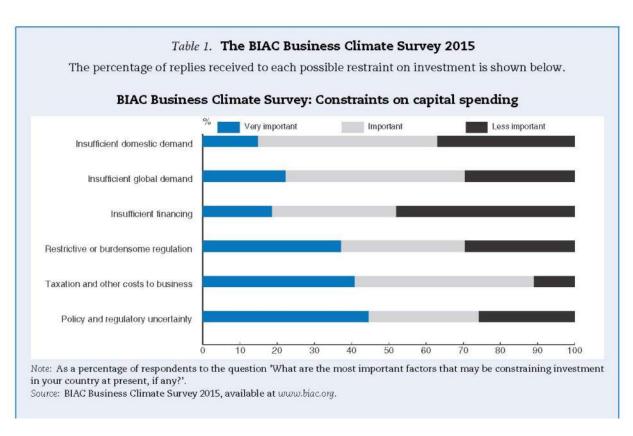
Note: Europe refers to the European Union and Switzerland.

Source: page 43 in OECD (2015b): data from Bloomberg, OECD calculations.

On the empirical side we should also report on the results of the most recent Business Climate Survey (March-April 2015) which illustrate the factors identified by the business community as the most important in constraining corporate investment. 27 national business associations were surveyed with the options to classify factors as "very important", "important", or "less important". The percentage responses across the six listed factors are given in *Table 1*.

The most important factor listed is "policy and regulatory uncertainty". This factor in a business investment decision is typically accounted for by adjusting the discount rate to reflect the increased risk and uncertainty associated with the project. It is clear that for many types of investment projects the required risk premium would boost the cost of

capital by a significant amount to drive the value-creation gap well into the negative range. Thus with macroeconomic fiscal policy handcuffed within the European Union and monetary policy within the Euro Zone at the zero lower bound a more productive policy adjustment would be to work on the non-traditional investment stimulation policies focused on reducing uncertainty in both general economic policies and business regulation.



Policy Implications

The empirical analysis concludes that the main factor holding back non-residential investment since the global financial crisis has been the overall weakness of economic activity, both within the European Union and internationally. As expected firms have reacted to weak demand, both current and expected future, by cutting back on capital spending. Evidence from business surveys provides complementary support: firms often mention lack of customer demand as an important factor limiting their production and employment. Beyond a generally weak economic climate, other factors, including financial constraints and policy uncertainty, have also held back investment in some economies, particularly euro area economies with high borrowing spreads during the 2010–11 sovereign debt crisis. Confirmation of these additional factors come from extensive analysis of microeconomic firm-level data.

What policies, then, could be most effective in inducing a recovery of investment? Addressing the broad weakness in economic activity is crucial for supporting private investment. A large share of the output loss since the crisis can now be considered as permanent, and policies are thus unlikely to return investment fully to its overstated goal. This implies that there is remaining scope for using fiscal policies to help sustain the recovery and thus to encourage firms to invest. In the European Union, accommodative monetary policy also remains essential to prevent real interest rates from rising prematurely, given persistent and sizable economic slack as well as continued strong disinflation dynamics. Overall, a comprehensive policy effort to expand output would contribute to a sustained rise in private investment.

There is a strong case for increased public infrastructure investment in advanced economies with clearly identified infrastructure needs and efficient public investment processes and for structural economic reforms more generally. In this context, additional public infrastructure investment may be warranted to stimulate demand in the short term in a fiscally-constrained public sector, feedback to raise potential output in the medium term, and thus perhaps "crowd in" additional private investment. There is also a widespread need for structural reforms in many European Union economies including policies directed toward increasing labor force participation and potential employment as a reaction to aging populations. By increasing potential output such policies should positively stimulate private investment. The evidence presented of financial constraints holding back investment, particularly the case of small and medium sized enterprises, suggests a role for policies aimed at tackling debt overhang and cleaning up bank balance sheets to improve credit availability. A medium term goal would be to increase the range of financing opportunities by going beyond a successful Banking Union and realizing the creation of a realistic framework for a Capital Union.

References

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