"Globalisation and the Irish Economy: A Macro-Financial Perspective"

Philip R. Lane, Governor of the Central Bank of Ireland

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Introduction

It is an honour to be invited to deliver the Geary Lecture. Roy Geary played a critical role in the development of social science research in Ireland, both through his personal contributions and his leadership roles at the CSO and the ESRI. In addition, Roy Geary made a significant global contribution, both through his research and as head of the national accounts division of the UN Statistical Office during 1957-1960. Especially for later-stage researchers, it is also inspiring to know that many of his publications were written late in his career, with more than half published after his 65th birthday (Spencer 1993).

Since the mid-1960s, the Geary Lecture series has proven to be an important conduit for the transmission of the advances in research in the social sciences by exposing Irish audiences to the world's finest scholars. Indeed, in preparing this lecture, the 21st and 24th Geary Lectures delivered by Rudi Dornbusch and John Dunning were important references. As an undergraduate student, I was privileged to be in the audience for the Dornbusch lecture and was immensely impressed by his erudition, clarity of expression and expertise: he was a role model for anyone interested in applied macroeconomics. I will return to the topic of the Dornbusch lecture – European monetary integration – later in this lecture. The Dunning lecture remains highly relevant today, in terms of emphasising the role of the State in economic development in a globalised system.

Finally, the Geary Lecture is also an occasion to reflect on the central role played by the ESRI in the analysis and formulation of economic and social policies in Ireland. During my time on the ESRI Council during 2009-2015, I gained a particular appreciation for the sustained scholarship undertaken by the ESRI, which is the home of so many long-term research programmes that are irreplaceable in terms of shaping our understanding of the forces driving economic and social development in Ireland.

In this lecture, I wish to address the implications of globalisation for the macro-financial policy framework. Of course, the macro-financial sphere is just one dimension of the relationship between globalisation and national policymaking.[1]

In relation to economic policy, a trio of trilemmas capture the tensions in determining policy choices in an integrated world economy. First, the monetary trilemma postulates that only two of the following three choices are simultaneously feasible: an independent monetary policy; a stable exchange rate; and unrestricted international capital mobility (Obstfeld et al 2005). Among the advanced economies that largely adhere to the principle of unrestricted capital mobility, we see many large countries with independent monetary policies and floating exchange rates and some smaller countries prepared to live under a pegged exchange rate. Twenty years ago, an extra policy option was introduced: the sharing of a common monetary policy through the elimination of national currencies in the form of European monetary union: I will return to an evaluation of the single currency later in this lecture. Finally, in the cases of some major emerging economies, restrictions on international capital mobility are imposed in order to target both a stable exchange rate and some independence in domestic monetary policy.

Second, the financial trilemma has it that only two of the following three options are possible: financial stability; independent national financial policies; and cross-border financial integration (Schoenmaker 2011). A restrictive approach to cross-border financial trade can enable a country to combine the maintenance of financial stability with purely domestic financial sector policies, while liberalisation in financial services trade typically requires considerable cross-border policy collaboration if financial stability is to be achieved, especially during periods of financial turmoil.

[1] The implications of global and regional integration for policymaking have been much studied in recent decades. Indeed, I spent 2002-2008 as Director of the Institute for International Integration Studies (IIIS), which aimed to provide multi-disciplinary perspectives on the myriad policy challenges associated with cross-border integration. The work of the IIIS is archived at http://www.tcd.ie/iiis.

Third, as developed by Dani Rodrik, the political economy trilemma lays out the restrictive choices between: deep economic integration; democratic politics; and national policy autonomy (Rodrik 1997, 2010). In analysing the scope for international policy cooperation in managing globalisation, the limits imposed by the national nature of democratic politics need to be taken seriously. In Europe, the strategy has been to develop the institutional development of the European Union in order to provide sufficient democratic foundations for enhanced integration across various policy dimensions: we return to the political economy of the euro later in this lecture.

This triple set of trilemmas constrains the conduct of macro-financial policies in a globalised economy. In order to maintain my focus on the macro-financial dimension, I do not attempt to provide a wider analysis of globalisation. In particular, I fully recognise that the globalisation of trade patterns, technological diffusion and international production chains have profound implications for long-term living standards and environmental sustainability, while also affecting the distribution of income across borders, across different types of workers and across different factors. In turn, this means that policymakers should incorporate the implications of globalisation in the design of environmental, education, productivity, and social protection policy frameworks (Dunning 1993, Rodrik 1997, Rodrik 2010). It also means that European-level and global-level policy institutions are necessary if cross-border spillovers are to be adequately addressed.

As indicated, I do not explore these wider topics, in order to give due attention to the implications of globalisation for the macro-financial policy framework. Of course, this also reflects my comparative advantage, in terms of my research career and my current position in central banking.

In what follows, I divide my remarks into two parts. First, I will discuss the measurement challenges generated by the globalisation of finance and production: the assessment of macro-financial risk turns on the analysis of the available data and it is dangerous to rely on uninformative or misleading information. Second, I will examine the implications of globalisation for the macro-financial policy framework, in the particular context of the Irish economy.

Measurement and Globalisation

Evidence-based macro-financial policymaking relies on the availability of useful information about macroeconomic and financial developments. Over the last two decades, the globalisation of production chains and the increased global footprint of multinational firms have moved ahead of the empirical implementation of national accounting methods (Avdjiev et al 2018, Torslov et al 2018). In relation to international finance, the scale and complexity of cross-border financial positions are difficult to map to the traditional analytical frameworks underpinning financial stability analysis (Lane and Milesi-Ferretti 2001, 2007, 2018).

In relation to macroeconomics, it has been understood for a long time that the large role of multinational firms in Ireland means that adjustments are required in order to measure national income. In relation to the financial system, the large size of the international financial services sector in Ireland means that the underlying financial positions of Irish-domiciled firms and households are not visible in the headline data, which are dominated by matched inward and outward flows by international financial intermediaries.

These measurement challenges have the potential to distort risk assessments and policy analysis. For instance, the increased systemic risk taking by Irish retail banks in the mid 2000s was not immediately visible in the aggregate financial statistics, which were dominated by the internationally-orientated foreign-owned banks that were far bigger than the domestic retail banks (Honohan 2006, Lane 2015). This posed interpretation problems not only for domestic policy analysts but also the international financial community that inevitably relies on the aggregate data for a snapshot view of each economy and financial system.

In relation to multinational firms, a long-standing adjustment was to focus on GNI (gross national income) or its close cousin GNP (gross national product) rather than GDP (gross domestic product). This adjustment captured that the (net-of-tax) profits earned by foreign firms operating in Ireland - were not available for domestic consumption or investment, even if partially offset by the foreign earnings of Irish-domiciled multinational firms.

Moreover, this adjustment was robust to the well-known transfer problem by which multinational firms might set prices for intra-firm cross-border transactions to allocate profits to the jurisdictions with the most favourable corporation tax regime.

In relation to multinational firms, the increasing global economic share of superstar firms in a number of industries has resulted in greater sensitivity of national accounts to the production and financial choices of these firms. This trend is compounded by the increasing importance of intangibles such as intellectual property assets in global production, since the assigned ownership of these assets can be easily moved across borders and across legal entities. It is further compounded by the expansion of global production chains, which has enabled multinationals to combine management expertise in one location with IP assets in a second location and labour and production facilities in a third location (Lane 2015, Economics Statistics Research Group 2016, Lane 2017, Advjiev et al 2018, Fitzgerald 2018).

With some effort, it is possible to look through the headline data. In relation to net international financial flows, Galstyan and Herzberg (2018) find that the most effective risk indicator for Ireland is the stock of net external debt liabilities of domestic banks, with a suggested threshold value of 17 percent of GNI*.[2] This strips out the net external debt of internationally-orientated banks, investment funds and multinational firms and recognises the close linkages between cross-border debt flows and domestic credit expansion (Lane and McQuade 2014).

Such a metric would have raised a red flag about Irish external debt by the first quarter of 2004 and peaked at 44 percent in the third quarter of 2008. The Irish retail banks held net external debt assets of around 16 percent at the end of 2017, such that current international balance sheet risk is low.

In similar fashion, Galstyan (2018) strips out the foreign assets and foreign liabilities of externally-orientated and externally-owned entities from the Irish international investment position data. The outcome of this exercise is a far smaller international balance sheet,

[2] This is a transformation of the threshold for net external debt liabilities estimated by Catao and Milesi-Ferretti (2014).

which more accurately represents the external exposures of Irish households and Irish-domiciled entities.

In line with the recommendations of the Economic Statistics Review Group (ESRG) (2016) that was formed to address the impact of globalisation on the measured national accounts, the CSO now produces supplementary national accounts estimates in the forms of adjusted gross national income (GNI*) and an adjusted current account balance (CA*). The two main forces driving these adjustments are the mobility of IP assets and the ability of firms to re-domicile (that is, change headquarters) across countries.

The underlying principle is that activity taking place elsewhere should only have minimal impact on the measurement of the Irish national accounts. In the case of mobile IP assets, a decision by a firm to transfer these assets from a legal entity in some other location to a legal entity resident in Ireland should only matter for Irish activity data if it is associated with a change in production patterns. In contrast, if these IP assets are primarily deployed elsewhere (with the Irish legal entity charging royalties to the overseas production facility), it would be highly misleading to include the depreciation charge on the IP assets in the Irish national accounts.[3]

In relation to a firm that re-domiciles into Ireland, this should have no impact on the allocation of the profits earned by this firm if there is no associated change in the shareholder register. However, due to a quirk in the differences in the treatment of corporate income across the direct investment and portfolio equity components of the balance of payments, re-domiciles are not neutral in the standard accounts, such that the correction introduced by the CSO is required.

Taken together, these corrections make a big difference. The 2017 data show that GDP is 62 percent ahead of GNI*. To state the obvious, an accurate measure of the size of the economy is fundamental to the conduct of macro-financial policy and, more widely, for the evaluation of a wide range of public policies. In related manner, the headline current

[3] There are some related issues in relation to the treatment of leased aircraft, which are another example of extremely-mobile capital assets.

account measure shows a large surplus, whereas CA* is close to zero : this makes a big difference in terms of assessing the risks facing the Irish economy.

Given the extreme nature of the Irish data (especially since 2015), the CSO has taken the lead in addressing the implications of globalisation for national accounts data. These innovations are being closely watched elsewhere and it is evident that a significant number of other countries should take similar steps. Even if the corrections at a macroeconomic level would not be as quantitatively significant in most cases, such adjustments can have a substantial impact at the sectoral level. For instance, Guvenen et al (2018) calculate that the level of productivity in R&D-intensive industries in the United States is under-stated by about 8 percent due to offshore profit shifting.

The limitations of balance of payments data have been partially addressed through the publication of more detailed sectoral data. Although take-up is patchy, more countries now release information on the sectoral distribution of cross-border flows and positions. This is helpful since the identity of the holder of an asset or the issuer of a liability may matter for the transmission of shocks and the stability of these positions (Galstyan and Lane 2013, Galstyan et al 2016). For some countries, it is now also possible to examine security-level data that provides a more granular insight into the trading of individual assets, with the evidence suggesting that different investor types respond differently to asset price fluctuations (Timmer 2018, Bergant and Schmitz 2018a, 2018b).

A further step in making cross-border financial data more useful is to establish the currency exposures embedded in these positions. This is a fundamental issue since the response of an economy to exchange rate movements depends on its net foreign currency exposure. Although standard balance of payments reports do not routinely report currency positions, it is possible to obtain plausible estimates through the judicious merging of a range of datasets, together with some modelling of the likely currency holdings in a given sector (Lane and Shambaugh 2010, Benetrix et al 2015).

An additional strategy is to integrate the external balance sheet with the domestic sectoral financial accounts (Allen 2018a, 2018b). For instance, if a country is a net external debtor,

at least one domestic sector must be a net debtor. This matters for the likely macroeconomic implications of external debt, given plausible differences in behaviour across households, non-financial corporates, the government and the financial sector. For instance, Allen (2018a) shows that the standard list of factors that are understood to correlate with external imbalances show more systematic co-variation with the imbalances in the non-financial corporate and government sector. This stands in contrast to the typical textbook model that focuses on household imbalances as the driver of external imbalances. This pattern suggests that greater attention should be paid to the net financial positions of non-financial corporates and governments in terms of the analytics of the net external position.

In the other direction, the evolution of external debt also depends on the drivers of imbalances at the domestic sectoral level. For instance, Allen (2018b) finds that house price appreciation improves the balance sheet of the household sector and, in turn, is associated with an increase in external debt. This is consistent with home values playing a collateral role and inducing a wealth effect, with both channels consistent with a negative correlation between house prices and the external balance.

At the same time, it is important to recognise that further measurement improvements are required, both in Ireland and internationally. At the domestic level, as advocated by the ESRG, it would be illuminating to obtain a greater disaggregation of the accounts of multinational firms between activities that call on domestic resources versus activities that largely take place elsewhere but are booked in Ireland. This is necessary if we are to understand properly their role in the Irish economy, even if it poses serious methodological and practical challenges.

At the international level, improved data sharing across borders would be helpful across many dimensions. In relation to production, a common understanding across jurisdictions in relation to the global operations of multinational firms would improve the consistency of national accounts. In relation to international finance, a full matrix of information linking the ultimate owners of a financial asset and the ultimate obligors of the corresponding financial

liability would facilitate much more accurate assessments of international financial exposures and international transmission channels.

It should be recognised that these aspirations collide with the current reality that statistics are primarily collected under national laws, which make it difficult or impossible to share granular data across borders for statistical purposes. Of course, this is just one manifestation of the Rodrik political economy trilemma, whereby there is a tension between international economic integration and the national nature of legislatures and politics.

The Macro-Financial Policy Framework and Globalisation

In the introduction, I outlined the monetary, financial and political economy trilemmas in policymaking under economic and financial integration.

In thinking about the impact of globalisation on macro-financial dynamics, it is important to recognise that the international mobility of capital, labour, finance, firms and technologies can either amplify or dampen domestic shocks.

In relation to amplification, a boost to the domestic business environment can trigger a larger output response than would be possible in a closed economy, since the prospect of higher investment returns and higher wages draws in capital and labour from overseas. In reverse, a negative shock may be amplified by capital outflows and net emigration. In terms of cross-border financial integration, a domestic boom-bust cycle can be further amplified if domestic residents take on extra foreign leverage during the upswing that in turn requires additional deleveraging during the downturn.

In relation to dampening, firms can opt to extend overseas production or switch to imported inputs if a boom triggers rising domestic cost pressures. In the other direction, if a recession is associated with a decline in domestic costs, the end of the recession can be brought forward by the entry of foreign firms and foreign capital that are attracted by the improvement in the cost base. The dampening of the cycle is also facilitated by international financial risk sharing, with domestic risks partly transferred to foreign investors through

direct ownership and portfolio equity claims and domestic residents holding diversified foreign portfolios (Lane 2000a, Benetrix 2015).

Both amplification and dampening forces have been active in shaping Irish economic performance. If we focus on the last fifteen years, the construction and lending booms were clearly amplified by the pulling in of foreign funding, foreign inputs and foreign workers during the 2004-2007 period. At the same time, the expansion in the export-orientated sector (including the industries dominated by foreign multinationals) was restricted by the adverse impact of a decline in competitiveness (Giavazzi and Spaventa 2011, Lane and Pels 2012, Benigno et al 2015). The sensitivity of traded-sector output to the real exchange rate is especially high in an economy dependent on multinational firms, since the location and reinvestment decisions of these firms provide extra margins of adjustment (Bradley and Fitzgerald 1988). Another dampening factor was that foreign investors held a significant share of the equity in domestic entities (including domestic banks), such that part of the gains during the boom were distributed to foreign investors.

In turn, the intensity and severity of the crisis was amplified by the withdrawal of funding from the domestic financial system, which was a central element in the playing out of the crisis dynamics. However, the improvement in cost competitiveness as a result of the downturn served to accelerate the recovery, with foreign multinationals best placed to take advantage of a lower-cost business environment. More generally, the dual nature of the Irish economy provided important stabilisation, with the multinational-dominated sectors less affected by the contraction in domestic demand.

The decline in property prices and equity values (including bank shares) also triggered significant asset sales to foreign investors, which contributed to the stabilisation and recovery in asset markets. The severity of the crisis was also limited by the transfer of losses to foreign investors who had taken risks during the boom period, both through their equity investments in domestic entities and the significant decline in the value of the subordinated debt instruments issued by Irish banks.

It follows that the relation between domestic shocks and globalisation is quite nuanced, with both amplification and dampening mechanisms at work. Of course, globalisation also means that the Irish economy is exposed to foreign shocks: even if the domestic fundamentals are in good shape, it is still possible to experience positive or negative shocks to the trend and cyclical components of output or to the financial cycle purely on the basis of external developments.

Taken together, these characteristics mean that a globalised economy has the capacity to be quite volatile, since it is exposed to both cyclical and trend shocks which are further subject to an array of amplification and dampening mechanisms that may operate to different timelines. Furthermore, this intrinsic volatility interacts with the difficulty of forming reliable beliefs in such an environment, with the dynamics of expectations constituting another mechanism driving macro-financial dynamics (Gennaioli and Shleifer 2018).[4]

It follows that the design of a stability-orientated macro-financial framework should seek to weaken amplification mechanisms and reinforce dampening mechanisms in relation to cyclical shocks. In terms of execution, this is especially tricky for volatile economies, since it is typically difficult to tell apart trend shocks and cyclical shocks. For instance, if there is an improvement in the underlying sustainable growth rate of the economy, a persistent current account deficit can be desirable in terms of smoothing the funding of associated investment and consumption patterns. In contrast, a current account surplus may be the desired response to a transitory boost in output. The analytical importance of trend-cycle decompositions means that data diagnostics and forecasting are primary functions in policymaking, while exercising due humility given the intrinsic uncertainty involved in such exercises.

In relation to cyclical shocks, the optimal fiscal response requires a counter-cyclical pattern in the budgetary stance, anchored by a strong public financial balance sheet – a combination of low gross public debt and a reserve stock of liquid financial assets - that is robust to solvency risk even under stressed scenarios. In addition, fiscal policy can be

[4] See also Lunn (2013).

deployed at a microeconomic level. In particular, time-varying tax rates on consumption and investment can replicate some properties of national-level exchange rate and interest rate policies by altering the intra-temporal and intertemporal terms of trade.

While Ireland achieved small headline budget surpluses during the boom period, the underlying budget balance was much less healthy, given the reliance on construction-intensive tax revenues (Lane 2010). The scale of the boom was such that significantly more positive budget surpluses were warranted, with the deterioration in fiscal discipline towards the end of the boom period especially unfortunate. In 2007, the fiscal surplus in Ireland was just 0.2 percent of GDP, whereas it was 5.1 percent in Finland, 5 percent in Denmark, 3.3 percent in Sweden and 2 percent in Spain.

Through the introduction of national fiscal responsibility laws and independent fiscal councils (together with the operation of the EU-level Stability and Growth Pact), the revised institutional environment for the conduct of fiscal policy is intended to support the long-term fiscal discipline that is required if the cyclical component of fiscal policy is to be deployed in a stabilising manner. At the same time, these frameworks can only play a supporting role: the path for fiscal policy is ultimately determined by the decisions of the political system.

In relation to macroprudential policy, the counter-cyclical capital buffer (CCyB) is intended to limit the amplification of downturns through the accumulation of additional capital by banks during cyclically-strong periods. In the event of an adverse cyclical shock, this capital buffer can be released, thereby mitigating the damaging pro-cyclical withdrawal of credit supply under adverse conditions. In order to be effective in building resilience, it is essential that the CCyB is activated sufficiently early during upswings in the financial cycle (Lozej and O'Brien 2018, O'Brien et al 2018). Otherwise, there is a risk that the CCyB is activated too late, especially taking into account the one-year lead-time in its implementation. Given the lack of historical evidence in relation to novel instruments such as the CCyB, the calibration of such buffers benefits from the insights of macroeconomic models that enable simulations of alternative rules (Clancy and Merola 2016, 2017).

In relation to new mortgage lending, borrower-based measures that impose (flexible) ceilings on loan-to-income (LTI) and loan-to-value (LTV) ratios have built-in features that limit pro-cyclical dynamics. In the absence of such ceilings, cyclically-strong economic conditions might otherwise drive mortgage market dynamics towards more aggressive LTI and LTV ratios due to upward revisions (by lenders and borrowers) in projections of future levels of house prices and incomes. In addition, by limiting the risks of over-borrowing by households and over-lending by banks, household and bank balance sheets should be more resilient in the event of a future downturn.

More generally, the resilience of the financial system is dependent on its structural soundness (Lane 2013). If financial institutions are well capitalised and hold sufficient liquidity buffers, the system can more easily absorb cyclical shocks. Resilience is also boosted by a supportive institutional environment. For instance, a legal system that has the capability to facilitate the restructuring of non-performing loans and the cleaning up of insolvencies limits the risk that cyclical downturns mutate into phases of persistent underperformance. Equally, a structurally-robust financial system is stabilising for the real economy by avoiding pro-cyclical fluctuations in credit availability.

So far, I have primarily focused on fiscal and macroprudential policies. How should we think about the role of the currency system in addressing the implications of globalisation for macro-financial stability? The obvious starting point is the monetary trilemma: financial integration calls for a choice between a stable exchange rate and an independent monetary policy. In Europe, the monetary union provides a unique option: the sharing of monetary autonomy among the member countries through the elimination of national currencies, with the external value of the euro fluctuating against the rest of the world.[5] This arrangement facilitates the potential gains from financial integration, while the elimination of intra-area currency volatility supports the durability of the Single Market by ruling out politically-divisive nominal exchange rate adjustments (Dornbusch 2003).

[5] See, amongst others, Lane (1997, 1998) and Barry (2017) on ex-ante assessments of the likely impact of the euro on the Irish economy. See also Lane (2006, 2012, 2015, 2018) for more general assessments of the common currency.

A shared currency is especially effective in managing common cyclical shocks, since the single monetary policy works in the same direction for all member countries (Lane 2000b). The elimination of national currencies also limits the scope for financial shocks to drive macroeconomic outcomes, even if country-specific financial speculation is still possible through sovereign bond and bank funding markets. Moreover, the potential stabilising role of country-specific exchange rate adjustment can be overstated, especially if one takes into account the balance sheet, wealth and political economy effects associated with currency movements (Lane and Stracca 2018).

In related manner, it is open to question whether an independent interest rate policy is necessarily stabilising for small, open economies under a high degree of financial integration (Bruno and Shin 2015, Lane 2015, Lane 2018). For instance, a positive interest rate differential may induce an increase in foreign-currency borrowing, while currency appreciation may encourage extra risk taking by increasing the collateral value of local-currency assets.

Finally, a fundamental difference between a currency union and a system of fixed exchange rates is the operation of the common central banking liquidity facility. During the crisis, cross-border central bank liquidity flows were extremely high, acting to cushion the impact of private capital flight (Gros and Alcidi 2013, Lane 2013, Fagan and McNelis 2013, Whelan 2014, Lane 2015). More generally, the existence of a common liquidity facility acts as a deterrent to speculative attacks, with market traders aware that the common central bank can replace run-induced withdrawals of liquidity.

While the crisis dramatically exposed the institutional weaknesses in the original design of the euro, the reforms that have been introduced in response to the crisis has strengthened the common currency along a number of dimensions. First, the European Stability Mechanism stabilises sovereign debt markets by providing an official funding reserve option (subject to conditionality). Second, the ECB's Outright Monetary Transactions (OMT) programme has clarified the commitment of the ECB to rule out redenomination risk for countries that demonstrate commitment to fiscal solvency. Third, the development of a common supervisory approach to financial regulation – which is hardwired in banking

through the Single Supervisory Mechanism – serves to reduce the risk of national policy errors in the oversight of the financial system. Fourth, the introduction of improved recovery and resolution frameworks (including the operation of the Single Resolution Mechanism) helps to reduce the risk that individual bank failures trigger a system-wide crisis. Fifth, the activation of national macroprudential policy frameworks (typically absent or weak before the crisis) is necessary to mitigate cyclical financial risks. Sixth, the strengthening of the European fiscal framework is a necessary precondition for greater cross-border integration, in view of the close relationship between fiscal stability and financial stability.

Looking to the future, the completion of banking union and capital markets union can further help to mitigate national macroeconomic shocks. First, banking union and capital markets union may facilitate more diversified international ownership of bank equity and contingent debt instruments, such that the costs of distressed banks are not solely concentrated in the domestic economy. Second, banking union may lead to more geographically-diversified financial institutions, such that local shocks do not undermine the viability of banking operations. Indeed, the US experience is that the liberalisation of cross-State banking has dampened the amplification of regional shocks.

Accordingly, my perspective on the implications of globalisation for macro-financial stability is that Europe has addressed the triple trilemmas by recognising that the internationalisation of policymaking can go a long way in reconciling integration with monetary stability and financial stability. In line with the political economy trilemma, this has required the parallel development of EU-level and inter-governmental institutions that can ensure that policymakers are democratically accountable. As is well understood, it follows that the future evolution of the euro area and the European financial system turns just as much on European political dynamics as on the technocratic debate about the relative merits of further economic and financial integration.

Conclusions

In this lecture, I have tackled two dimensions of the implications of globalisation for macro-financial stability in Ireland. First, I have argued that good measurement is a pre-requisite for robust policymaking. By force of circumstance, Ireland has been an innovator in developing supplementary national account measures in order to filter out the impact of global financial engineering on domestic economic and financial indicators. In terms of the research agenda, there should be a high premium on forensic empirical analyses that reveal the underlying forces shaping economic and financial outcomes.

Second, I have laid out the analytics of macro-financial policymaking in a globalised economy. It is clear that a dual approach is required: much can be achieved through the internationalisation of policymaking (especially at a European level), while domestic policymakers have a heavy responsibility to safeguard stability through prudential fiscal and macroprudential measures.

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