International capital market fragmentation

By Paul Richards

Summary

ICMA has encouraged open and integrated capital markets across national borders for almost 50 years. A great deal of progress has been made towards integration over that period, both by the authorities and by the sell-side and buy-side users of the capital markets themselves. But now there are also countervailing pressures for capital market fragmentation, which are the subject of this paper.

Open and integrated capital markets are under threat from political and economic pressures for protectionism and fragmentation in a number of ways: a reassertion of national sovereignty; a backlash against globalisation; a lack of trust in the financial system; the migration crisis; the questioning of the role of global institutions; and the failure of multilateral trade deals.

It is not yet clear how strong these pressures for capital market fragmentation will be. But there are fragmentation risks. In Europe, they arise from Brexit and doubts about the future composition of the euro area. At global level, they include risks of regulatory divergence (eg between the EU and US) in future; risks in cases in which regulatory equivalence is incomplete at present; ring-fencing; gold-plating; extra-territoriality; and risks of "one-size-fits-all" regulation. There are also risks arising from fragmentation of market liquidity, home bias in investment and an unlevel playing field for competition.

International capital market fragmentation adds costs for users and carries risks for financial stability. While it is not possible reliably to estimate these costs and risks, recent research provides evidence of the potential benefits of capital market integration for real growth and financial stability, depending on the form that integration takes. If capital markets fragment, these benefits will be lost.

What more can the authorities do to prevent fragmentation? At a high level, the challenge for policy makers is political. At a technical level, there is a case for establishing broad global standards of regulatory equivalence under the auspices of the G20; and common standards of good market practice in the cross-border securities markets at global level through IOSCO. At a minimum, the critical point is to preserve the international integration of wholesale capital markets.

Introduction

1 ICMA has encouraged open and integrated capital markets across national borders for almost 50 years. Open and integrated capital markets contribute to economic growth and employment internationally. A great deal of progress has been made towards integration[1] over a long period. This can partly be attributed to the authorities, both at EU level and at global level (through the G20), and partly to the development of the capital markets themselves by the sell-side and buy-side firms using them. The process of capital market integration needs to continue because it is not complete: evidence for this is provided by the Capital Markets Union project at EU level, which is designed to increase the role of capital markets in financing EU economic growth, and the continuing work of the Financial Stability Board (FSB) at global level, which is designed to increase the resilience of the international financial system in response to the international financial crisis of 2007-09. One of the FSB's objectives is to maintain an open and integrated global financial system. Every G20 Leaders' Summit since 2008 has made a commitment to resist all forms of protectionism. But the latest G20 communiqué from Finance Ministers and Central Bank Governors no longer includes this commitment.[2]

1. "The market for a given set of financial instruments and/or services is fully integrated if all potential market participants with the same relevant characteristics: (i) face a single set of rules when they decide to deal with those financial instruments and/or services; (ii) have equal access to the above-mentioned set of financial instruments and/or services; and (iii) are treated equally when they are active in the market.": ECB: Financial Integration in Europe, April 2016.

2. G20 Finance Ministers and Central Bank Governors communiqué: Baden-Baden, 19 March 2017.

2 It is clear that there are now countervailing pressures for capital market fragmentation. They are the subject of this paper. What are the pressures for protectionism and capital market fragmentation, and are they growing? What are the risks arising from fragmentation? What are the potential costs for the real economy? What can the authorities do to prevent fragmentation, and how can the industry help? This is a paper for ICMA members and for international policy makers, both political and official. The focus of the paper is on the international bond markets in the context of the capital markets generally. And geographically, the focus is not only on Europe, but also at global level.

Pressures for protectionism and capital market fragmentation

3 International capital market integration is associated with open markets in goods and services which have developed globally since the Second World War, and in particular since the fall of the Berlin Wall and the integration of China into the global economy.[3] But there is some evidence that open and integrated capital markets are now under threat from political and economic pressures for protectionism and fragmentation in a number of ways:

4 *Reassertion of national sovereignty:* The referendum in the UK in June 2016 on whether to leave the EU (ie Brexit) was won by the leave campaign under the slogan: "taking back control" of national borders, national laws and national money. And the US Presidential election in November 2016 was won by Donald Trump under the slogan: "making America great again", for example by returning manufacturing jobs to the US from abroad, and ensuring that existing jobs do not move abroad. Although UK policy – "global Britain"[4] – and US policy – "buy American and hire American"[5] – are not the same, they can both be interpreted as evidence of a reassertion of national sovereignty and a backlash against globalisation by voters who have not benefited from it.

5 *Backlash against globalisation:* While there has been a very significant increase in real economic growth during the long period of globalisation, real growth has been much slower during the economic recovery from the international financial crisis of 2007-09 than in preceding periods of economic recovery; there has been slower growth in worldwide trade in goods than in overall growth; and there is evidence that growth has not been evenly spread. In the US, the economic benefits of growth have accrued to the top 5% of the population, while the bottom 95% had incomes in 2015 below 2007 levels. The share of wealth held by the richest 1% globally rose from one-third in 2000 to one-half in 2010.[6] In Europe, there is persistently high youth unemployment in parts of the euro area. Although globalisation has reduced inequalities between countries – eg between China, India and the West – it has increased inequality within countries, particularly in the West. To many people, globalisation has become associated with striking inequalities in income and wealth, low wages and insecure jobs. Open markets have so far created more new jobs than the old ones they destroy, but they are not popular when the public is worried about job security (eg as a result of competition from cheap imports, foreign labour and technological innovation).

6 *Lack of trust in the financial system:* Public confidence in the international financial system, which was damaged by the international financial crisis of 2007-09, will take time to repair. Taxpayers' money was used to bail out large parts of the international financial system. And since the financial crisis, the integrity of the financial system has been called into question by misconduct scandals, for which the financial institutions concerned have been fined by regulators. But the costs have been borne largely by shareholders in the companies concerned, while the individuals responsible have often not been punished. Leaving aside financial institutions, concerns have also been expressed about stateless corporations which "do not pay the tax they owe" in the countries in which they do business.

7 *Migration crisis:* Turmoil in the Middle East has led to mass migration in Europe on a scale not previously experienced since the aftermath of the Second World War, and the border between Russia and Eastern and North-Eastern Europe has become increasingly tense. The UK is proposing controls on EU immigration. And migration is not just a European issue. For example, President Trump has proposed a new wall along the US/Mexican border.

8 *Questioning of the role of global institutions:* The future role of the global institutions created after the Second World War – NATO, the UN, the IMF, the World Bank and (more recently) the WTO – has been called into question on a number of occasions in the past, but most recently by the new US President.[7] In the case of NATO, the main concern

3. President Xi: "Globalisation has powered global growth and facilitated movement of goods and capital, advance in science, technology and civilisation, and interactions among people.": Davos, January 2017.

4. UK Prime Minister: The Government's Negotiating Objectives for Exiting the EU: Lancaster House, 17 January 2017.

5. President Trump: Inaugural Address, 20 January 2017.

6. Mark Carney, Governor of the Bank of England: The Spectre of Monetarism: Roscoe Lecture, 5 December 2016.

in the US appears to be that Western Europe should pay more for its own security. But doubts have also been raised about the global liberalisation agenda which the IMF has advocated since it was founded; use of the WTO to resolve trade disputes has been questioned; and several large countries have been criticised as alleged "currency manipulators" (ie keeping their exchange rates artificially low in order to give them an advantage in external trade).

9 *Failure of multilateral trade deals:* A number of high-profile multilateral trade deals have recently failed to be agreed: in particular, the Transatlantic Trade and Investment Partnership (TTIP), involving the US and the EU, has not been agreed, while the US has decided not to join the Trans-Pacific Partnership (TPP) of 12 Asia-Pacific economies. The trade agreement between the EU and Canada (CETA) took seven years to negotiate and ratify, and was held up at the last moment by the Wallonian Parliament in Belgium. A priority for the new US Administration is to renegotiate the North America Free Trade Agreement (NAFTA) with Canada and Mexico.

Risks of capital market fragmentation

10 It is not clear at this stage how strong these pressures for protectionism and fragmentation will be. But they do represent potential threats to the global economy. While the potential impact on the global economy is much broader than their potential impact on international capital markets, it *is* possible to identify some of the risks of capital market fragmentation, both at European and at global level.

Fragmentation risks at European level

11 In Europe, the main risks of capital market fragmentation currently relate to Brexit and to the future composition of the euro area:

12 *Brexit:* The UK is planning to leave the EU Single Market when it leaves the EU.[8] Instead, the UK Government is planning to negotiate with the EU27 a bilateral free trade agreement which provides access to the EU Single Market for the UK as a third country (and vice versa). One approach would be to establish and maintain equivalence in capital market regulation between the UK and the EU27, with an independent third party for resolving disputes. It is not yet clear whether this would be practicable. An alternative would be for firms involved across EU capital markets to be separately authorised, capitalised and staffed in both the UK and the EU27, if they are not authorised already.[9] While the UK and the EU27 should have a mutual interest in minimising market uncertainty and disruption, the risks arising from Brexit would be greatest if the negotiations between the UK and the EU27 fail to reach agreement, and the UK has to fall back on trading with the EU27 under WTO and GATS rules.[10] That could lead to regulatory divergence between the UK and the EU27, raising costs for firms operating in two separate markets rather than the Single Market at present; it could lead to a regulatory "race to the bottom", raising financial stability concerns;[11] and it could also lead to capital market fragmentation by geographical location: eg if CCPs with significant euro-denominated business are required to be located in the euro area.

13 *Risk of fragmentation of the euro area:* The other main risk of capital market fragmentation in Europe relates to the future composition of the euro area. This was last an issue when Greece was threatened with expulsion from the euro area in 2015. It is not clear whether it will again become an issue in 2017. That may depend on the outcome of elections due in 2017 in France and Germany, and by February 2018 in Italy. Given the persistence of substantial imbalances in the euro area and the persistently high level of non-performing bank loans in several euro-area countries, there is a significant risk of reigniting the bank-to-sovereign debt loop which developed during the sovereign debt crisis in the euro area in 2010-12. Without greater financial integration, more labour mobility and substantial fiscal transfers, the euro area remains exposed to country-specific shocks. Any market concern would be reflected in a widening of government yield differentials and a loss of deposits from the banking system in the weaker countries. Financial institutions would attempt to

7. Congressman McHenry wrote to Janet Yellen, Chair of the Federal Reserve Board, on 31 January 2017: "The Federal Reserve must cease all attempts to negotiate binding standards burdening American business until President Trump has an opportunity to nominate and appoint officials that prioritise America's best interests." Janet Yellen replied on 10 February.

8. The priorities for the UK Government are to control EU immigration and not be subject directly to the European Court of Justice. These priorities are not consistent with being a member of the EU Single Market. See the UK Prime Minister's letter to President Tusk on 29 March 2017 triggering Article 50.

9. See ICMA: The Brexit Negotiations and the International Capital Markets, ICMA Quarterly Report for the First Quarter, 10 January 2017. See also the additional links on the ICMA Brexit webpage.

10. GATS rules provide a "prudential carve-out", under which the parties are generally permitted to retain restrictions on their financial markets for prudential reasons.

11. See also: Andreas Dombret, Member of the Executive Board of the Deutsche Bundesbank: The Possible Impact of Brexit on the Financial Landscape: London, 24 February 2017.

protect themselves against the risk of fragmentation by matching their loans to deposits in each euro-area country (ie "Balkanisation") rather than across the euro area as a whole.

14 *Other capital market fragmentation risks:* The EU Capital Markets Union project and the euro-area Banking Union project are both incomplete.[12] Quantitative easing (QE) by the ECB, accompanied by historically low euro-area interest rates, have helped to ease pressures for financial market fragmentation in the euro area by compressing spreads in bond yields and corporate lending rates between the core of the euro area and the periphery, and encouraging bank lending. But the EIB estimates that cross-border capital flows, which help reinforce international convergence, remain well below their pre-crisis levels; and SMEs continue to face higher lending rates and restricted access to equity capital.[13] The unresolved question is how financial markets will react when QE is withdrawn. In addition, there is market concern about the long-term viability of some pension schemes and insurance products in the euro area if low bond yields persist.[14]

Fragmentation risks at global level

15 While these fragmentation risks arise specifically in Europe, most risks of capital market fragmentation are potentially global in scope, with implications for Europe, the US and the rest of the world. Assessing global risks of fragmentation is not straightforward, not just because it is difficult to know whether they will materialise, but also because different geographic regions are affected in different ways; some risks relate to fragmentation that already exists rather than new risks that may emerge in future; and others relate to economic differences rather than fragmentation as such.

16 *Economic differences:* Many of the economic differences between the EU and the US do not relate to capital market fragmentation as such, but to the different stages in their respective economic recoveries from the international financial crisis of 2007-09. After the crisis, banks were recapitalised in the US much earlier than in the euro area. Bank profitability has recovered much more quickly in the US than in the euro area, where some banks still have a high level of non-performing loans. QE started and ended much earlier in the US, while in the euro area it has recently been prolonged until at least the end of 2017[15], as underlying inflation in the euro area is expected to remain below target. The economic recovery started earlier and has progressed faster in the US than in Europe, and financial markets are now anticipating fiscal expansion (eg through tax cuts and additional spending on infrastructure) as well as deregulation under the new US Administration, resulting in rising short-term US interest rates, and historically high bond yield differentials between US Treasuries and German Bunds.

17 *Risks of regulatory fragmentation:* The authorities have tried to address many of the regulatory issues arising from the international financial crisis already (under the auspices of the G20 through the FSB, BCBS and IOSCO): for example, by:

- preventing the need for taxpayer bail-outs in future by ensuring that the financial markets are safer and that systemically important financial institutions are more robust (as measured by capital, liquidity and leverage); and by ensuring that, if in future they become insolvent, certain of their creditors are bailed in (while protecting their smaller deposit holders) so that they are no longer "too-big-to-fail";
- setting standards of good practice, not just for financial markets but also for the conduct of firms and for the individuals who work in them;
- assessing the implementation and impact of G20 regulatory reforms introduced to date to see whether improvements can be made without rolling back the underlying reforms themselves.

18 In addition, the authorities continue to be involved in maintaining an open and integrated global financial system. In particular, progress has been made towards ensuring regulatory equivalence[16] between the EU and the US. But capital market integration is not complete; and there are risks of fragmentation:

- *Risks of regulatory divergence in future:* The new US Administration is giving a higher priority to deregulation, or at least to removing "over-regulation", than the EU and global organisations such as the FSB, which continue to emphasise that any new regulatory reforms should not roll back the underlying regulatory changes introduced by the G20 in response to the 2007-09 international

12. The Capital Markets Union project is coming up to its mid-term review. In the case of Banking Union, the key issues outstanding include a fiscal backstop for the Single Resolution Fund and the creation of a European Deposit Insurance Scheme.

13. EIB: Investment and Investment Finance in Europe, 2016.

14. See ESRB: Report on the Macroprudential Policy Issues Arising from Low Interest Rates and Structural Changes in the EU Financial System, 2017.

15. though at a lower rate of €60 billion per month from the end of March 2017 instead of €80 billion per month.

16. Regulatory equivalence is sometimes called "substituted compliance" or "mutual recognition".

financial crisis.[17] This may put regulatory equivalence (eg between EMIR in the EU and Dodd-Frank in the US) at risk.

- *Incomplete regulatory equivalence at present:* There are many cases where regulatory equivalence between the EU and the US is not complete: for example, pre-trade transparency requirements will be introduced in the EU under MiFID II in 2018, but there are no equivalent measures in the US; the EU model for paying for investment research under MiFID II will diverge from the US model; provisions for market abuse under the Market Abuse Regulation in the EU are not the same as in the US; new issue processes are similar but not the same; and requirements for reporting financial information differ.
- *Divergent national approaches to regulation:* Some regulations agreed globally are being implemented in different ways in different national jurisdictions: for example, there are diverging national and regional approaches to bank structural reform; the Fundamental Review of the Trading Book under the BCBS is being adopted in the EU in a differentiated way; and there are different structures under TLAC for bail-inable bonds in the EU (compared with a uniform structure in the US).
- *CCP regulation as an example of fragmentation:* CCP regulation in the EU and US is not harmonised. Research by ISDA shows that global derivatives markets have fragmented along geographic lines since the introduction of the US swap execution facility regime in 2013.[18] Although EMIR allows appropriately regulated third-country CCPs to operate in the EU, the US applies a different approach to authorising foreign clearers to operate in the US by requiring a full assessment by the CFTC.[19] More work is needed on CCP recovery and resolution. And while it does appear that reforms have improved clearing efficiency, participation and protection, these benefits are not evenly spread, and there are risks relating to operations, client clearing, concentration and capacity to use the repo market.
- *Ring-fencing:* The European Commission has proposed that non-EU global systemically important banks, or other non-EU banking groups with total EU assets (including branches) of at least €30 billion, with two or more subsidiaries in the EU, should set up intermediate holding companies in the EU with sufficient capital and liquidity in the EU to make sure they can be safely wound down if they fail. This follows the introduction of a US rule, in effect from 2016, requiring all foreign banks with two or more US subsidiaries holding over $50 billion in aggregate assets to set up an intermediate holding company.
- *Gold-plating:* In the EU, national gold-plating of regulation still occurs, and may have unintended consequences: eg there is a risk that national gold-plating of reporting requirements in Italy under Article 129 may reduce the role of Italian underwriters in new international bond issues, and the choices available to investors, if international bank syndicates choose not to distribute new issues to Italy because of the reporting complexity.
- *Extra-territoriality:* Where regulations are not aligned between different jurisdictions, but are intended to be extra-territorial in reach (eg the Financial Transaction Tax and FATCA), they can have an adverse impact on financial markets.
- *Risks of "one-size-fits-all" regulation:* In Asia, while China has taken significant steps to integrate its markets into the global economy, barriers remain to the free flow of capital and labour across its borders. Other Asian markets remain highly fragmented, and the effects of "one-size-fits-all" regulatory reforms vary widely in their application across national jurisdictions.

19 *Risks arising from fragmentation of market liquidity:*[20] It is difficult to pinpoint the direct impact of fragmentation on market liquidity, but there are a number of risks to note:

- One of the unintended consequences of new regulation since the financial crisis has been to increase the costs for banks in making markets. The number of primary market dealers and secondary market makers has declined and secondary market turnover has decreased and become more volatile.
- In the sovereign bond market, there is a close link between bond, CDS and repo market liquidity. Repo dealer balance sheets have shrunk by 30% or more. QE has accentuated the scarcity of collateral by withdrawing securities from the market, except where securities withdrawn from the market are lent back.
- Corporate bond markets are less liquid now than they were previously, particularly for smaller buy-side firms. While overall issuance of corporate bonds has increased, large issuers taking advantage of historically low interest

17. See also the Systemic Risk Council letter to Finance Ministers and Central Bank Governors: "Now is not the moment to relax or retreat": February 2017.

18. ISDA: Cross-Border Fragmentation of Global Derivatives: End-Year 2014 Update, April 2015.

19. PwC: Global Financial Markets Liquidity Study, August 2015.

20. ie the ability to buy or sell a financial asset without significantly affecting its price.

rates have been in the lead. For smaller issuers, there is little secondary market liquidity, which is limiting access to the primary market. Market makers are increasingly "tiering" their clients, as they become more selective about the clients to whom they allocate their limited balance sheet and risk capital, depending on the contribution which their clients make to profitability.

- The risks of fragmentation could become more pronounced, as and when QE in the euro area is withdrawn, spreads widen and interest rates rise. That would particularly be the case if the sell side's role shifts from acting as a principal to acting as an agent, unless buy-side firms become "price makers" rather than "price takers" and provide liquidity to other buy-side firms through all-to-all platforms.

20 *Risks of home bias:* Since the international financial crisis in 2007-09, the risks of an increase in home bias in bank lending and investment, and a corresponding reduction in cross-border lending and investment, have increased. The ECB estimates that internationally active banks have increased domestic lending faster than foreign lending recently. Investment at home – in preference to investment abroad – may have political attractions in the short term, even though there are longer term economic benefits from keeping markets open. In most developed countries, home bias largely arises from investor preference rather than government restrictions. But several emerging markets have erected barriers to global finance and introduced controls against capital inflows and, more recently, outflows.[21]

21 *Risks of an unlevel playing field for competition:* Concerns have also arisen about whether there is a level playing field for competition among capital market firms internationally. For example:

- *Fines:* Since 2008, wholesale market participants have paid $170 billion in misconduct fines.[22] It is sometimes alleged that misconduct fines by the US authorities on European market firms have given US market firms a competitive advantage over their European counterparts. But on the other hand, Ireland's tax treatment of Apple is the subject of a dispute with the European Commission.
- *National champions:* Decisions about company takeovers have never been a matter only for their shareholders; they also involve an assessment by government of their impact on competition, jobs and other issues, such as research and development. But there is an increasing risk of national barriers against foreign takeovers, especially takeovers by government-owned institutions in other countries.

The costs of capital market fragmentation

22 International capital market fragmentation adds costs for users (eg because financial institutions need to hold more capital and more liquid assets if they have to operate under a number of divergent regulatory regimes rather than under a single regime); and it carries risks for financial stability (eg if divergent regulatory regimes lead to regulatory arbitrage between them).[23] But it is not possible reliably to estimate the potential costs of fragmentation for the real economy, as it is not clear to what extent fragmentation risks will materialise. On the other hand, it *is* possible to identify the benefits for the real economy which have arisen from international capital market integration (ie where the benefits would be lost if capital markets were to fragment):

- At a macro level, global real per capita GDP has risen more than 2.5 times since 1960[24] (ie during the period of globalisation).
- At a micro level, international capital market integration has resulted in cheaper funding for governments and corporates, quicker payment transfers across borders, wider use of netting, and benefits for liquidity from the pooling of cash. These benefits could be lost if capital markets were to fragment.
- Capital market integration should also bring benefits for financial stability – particularly in the euro area as a monetary union – by sharing risks internationally through cross-border lending and investment, thereby limiting the impact of country-specific shocks.[25] These benefits could be lost as a result of "Balkanisation" or home bias.

23 Recent research on capital market integration concludes that integration is not in itself a public good; the potential benefits depend on what form it takes:

- First, financial integration needs to be based on long-term rather than short-term capital flows, if it is to be resilient: the withdrawal of short-term capital flows (eg bank deposits) can be disruptive and create financial instability: capital controls had to be imposed in two euro-area countries during the sovereign debt crisis of 2010-12.
- Second, financial integration only delivers lasting positive

21. ECB estimates from Peter Praet, Member of the Executive Board, ECB: The Future of Global Financial Integration, 17 November 2016.

22. Sir Jon Cunliffe, Deputy Governor, Financial Stability, Bank of England: Challenges for Financial Markets, 3 November 2016.

23. See Valdis Dombrovskis, Vice-President of the European Commission: Accelerating the Capital Markets Union: Bloomberg, 10 February 2017.

24. Mark Carney, Governor of the Bank of England: The Spectre of Monetarism: Roscoe Lecture, 5 December 2016.

25. Peter Praet, Member of the Executive Board of the ECB: The Future of Global Financial Integration, 17 November 2016.

effects on growth if countries in receipt of capital flows have sound economic policies and institutions capable of using them productively.

- And third, policy makers may face trade-offs between financial integration and financial stability. Following the crisis, the IMF adopted in 2012 a policy under which measures targeted at managing capital flows can be useful in certain circumstances; and the OECD is reviewing its code of liberalisation of capital movements.[26]

In other words, the objective should be qualitative integration rather than quantitative convergence. (See Box.)

The response to capital market fragmentation

24 The authorities are already involved in the attempt to maintain open and integrated markets (for example in the EU through Capital Markets Union and Banking Union, and at global level through the FSB, BCBS and IOSCO), and this work is expected to continue. But the question is what more the authorities can do to prevent the growing pressures for fragmentation, particularly at global level.

25 *Macroeconomic response:* At a high level, the challenge for policy makers is political: "how to manage and moderate the forces of innovation and integration

Costs and benefits of capital market integration

Several studies have been undertaken by experts for official institutions to estimate the costs and benefits of capital market integration (eg in terms of economic growth and financial stability) and to measure the level of capital market fragmentation, including whether it is increasing or not.

Capital market integration, growth and financial stability

An IMF working paper on *Financial Globalisation: A Reappraisal (2006)* argues that a critical reading of recent empirical literature lends some qualified support for the view that developing countries can benefit from financial globalisation, though with many nuances. The working paper also argues that there is little systematic evidence to support widely cited claims that financial globalisation leads to deeper and more costly crises in growth in developing countries.

Using data from 1974-2007, a BIS paper on *Financial Integration and Economic Growth (2010)* concludes that the effects of financial integration on economic growth differ considerably, depending on the type of external assets and liabilities as well as on the characteristics of countries that experience financial integration: foreign direct investment and equity liabilities have a positive impact on economic growth, while public debt liabilities have a negative impact; and countries with sound institutions and developed financial markets benefit more from financial integration. Financial integration also has an indirect effect on economic growth through its impact on other determinants of growth such as the volume of international trade and the development of domestic financial markets.

A paper published by the Bank of Canada on *Financial Integration, Globalisation, Growth and Systemic Risk (2010)*, using data from 1984-2009, concludes that: (i) financial integration has progressed significantly worldwide, within regions, and particularly in emerging markets; (ii) advances in financial integration and globalisation produce higher growth, lower growth volatility, as well as lower probabilities of systemic risk; (iii) financial integration fosters domestic financial development and the liquidity of equity markets; and (iv) the quality of institutions and corporate governance are important determinants of the levels of financial integration and globalisation. Thus, financial integration and globalisation appear to yield direct as well as indirect benefits in the form of improved growth prospects for countries and lower systemic risk.

Measures of capital market integration and fragmentation

In *The Future of Globalisation (November 2016),* the ECB considers whether, since the financial crisis of 2007-09, there have been increasing signs of a backlash against globalisation. The ECB argues that the evidence for such a trend reversal is mixed. For example, quantity-based measures of global financial integration, such as gross external assets relative to world output, have recently flattened out. But flow measures indicate international capital flows are now down to half their pre-crisis levels relative to world output, especially in developed economies. The ECB also publishes an annual report to monitor *Financial Integration in Europe*, most recently in April 2016.

26. Peter Praet, Member of the Executive Board of the ECB: The Future of Global Financial Integration, 17 November 2016.

which breed aggregate prosperity for the economy as a whole, but which also foster isolation and detachment for substantial proportions of the population."[27]

26 *Global regulatory equivalence:* At a technical level, could the authorities do more to promote regulatory equivalence globally? This would involve mutual recognition of each other's regulations, where the outcomes are equivalent even though a line-by-line comparison of the text is not the same.[28] It would also involve mutual recognition of supervisory arrangements. The current EU arrangements for third country equivalence represent a patchwork of equivalence, endorsement, recognition and third country passporting.[29] There are provisions for equivalence in some EU regulations but not others and, where equivalence does apply, it is not always complete; determining equivalence involves a judgment by the European Commission as well as a technical assessment, and takes time; and the determination of equivalence can be withdrawn at short notice, though this has not happened to date.[30] The EU provisions for equivalence were not designed with the UK's withdrawal from the EU in mind. However, the bilateral negotiations in prospect between the UK and the EU27 might provide an opportunity to address these issues. The outcome could well affect – and be affected by – EU equivalence with other third countries (like the US) as well as the UK.

27 Indeed, there is a case for establishing broad global standards of regulatory equivalence under the auspices of the G20. Global standards are not in themselves legally binding. They provide a common framework under which global financial services can develop, depending on confidence in, and mutual recognition of, the regulatory and supervisory machinery both by regulators and market participants. There are two complementary aspects to establishing global standards of equivalence:

- *Ease of equivalence determination:* "Equivalence regimes are easier to establish when they are based on international standards. For example, while the EU and US treat prudential capital for banks differently, both regimes are equivalent, as they are implementing a Basel international standard."[31]
- *Maintaining market access:* Global standards are not currently designed to provide market access. "Would it be possible to base market access on common recognition of higher level global standards which are transparent and subject to regular review? … A much broader commitment to open up market access using global standards would be a decisive step in the right direction at a time when openness of the world economy is more under threat."[32]

28 Working on a global approach of this kind – through the G20 with the FSB, the BCBS and IOSCO – is likely to be increasingly important for the UK authorities, given their loss of influence in the EU as a result of Brexit. But global rules limit the scope for unilateral regulation (or deregulation) in any one country. Regulation (or deregulation) needs to be multilateral, if it is to be effective. An effective global approach also depends on close cooperation – and mutual trust – between supervisors.

29 *Global standards of good market practice:* In addition to establishing standards of regulatory equivalence at global level, there is scope for setting common standards of good market practice at global level in the cross-border securities markets through IOSCO. Although IOSCO itself does not have enforcement powers, it does check with securities regulators whether they are complying with IOSCO standards. The IMF and the World Bank do the same. Private sector initiatives like the FICC Markets Standards Board, which has been established to set standards of good conduct in FICC markets internationally, should be complementary to IOSCO. Trade associations like ICMA also play an important role in setting standards of good market practice.

30 *Other global issues affecting capital market integration:* There are several other global issues affecting capital markets which require a global response, but where it is not yet clear whether they will become forces for integration in international capital markets or fragmentation:

- *Climate change:* There has been a global response to climate change through the Paris Agreement in December 2015. But it is not yet clear what the new US

27. Mark Carney, Governor of the Bank of England: The Spectre of Monetarism: Roscoe Lecture, 5 December 2016.

28. See: Cross-Border Regulation Forum to IOSCO Task Force on Cross-Border Regulation: Key Issues and Challenges Relevant to the Regulation of Cross-Border Business in Financial Services, 28 May 2014 and 23 February 2015.

29. See: Steven Maijoor, Chair of ESMA: Review of the European Supervisory Authorities: Opportunities to Ensure a Safe and Sound Financial System: European Parliament, Brussels, 8 February 2017,

30. For an explanation of the current arrangements, see: European Commission Staff Working Document: EU Equivalence Decisions in Financial Services Policy: An Assessment, 27 February 2017.

31. Sir Jon Cunliffe, Deputy Governor, Financial Stability, Bank of England: Evidence to the House of Lords European Committee: Brexit: Financial Services, 15 December 2016.

32. Andrew Bailey, Chief Executive of the FCA: speech on global standards: Berlin, 26 January 2017. See also Andrew Bailey's letter to Andrew Tyrie, MP, Chairman of the Treasury Committee, House of Commons, 13 January 2017.

Administration's policy will be, and what impact this will have. The outcome may affect international capital market involvement in sustainability (eg through the issue of green bonds), for which international standards are set through the ICMA Green Bond Principles.

- *Infrastructure finance:* The new US Administration is widely expected to promote long-term infrastructure projects (eg by financing them with long-term Treasury debt). The European Fund for Strategic Investments (EFSI) has already made some progress on infrastructure financing in Europe. But it is not yet clear to what extent private sector financing of infrastructure projects in the international capital markets will be able to make significant headway, if capital markets fragment.
- *FinTech and digitalisation:* The impact of technological changes (eg distributed ledger technology and RegTech) on the functioning of markets is not yet fully understood. While technological changes have the potential to increase the market efficiency of back offices and compliance functions, they also carry risks (eg as a result of cyber-crime). It is not yet clear whether they are a force for integration or fragmentation (or both). There may also be implications for financial stability, which the FSB has been asked to consider.
- *Corporate tax base:* The G20's Base Erosion and Profit Shifting initiative is intended to create a fairer system for taxing international corporates, and the OECD is leading the global effort to achieve this. It is not yet clear how successful the initiative will be.
- *Tax on debt interest and dividends:* There are new proposals in the EU[33] and in the US to change the balance between tax rates on debt interest and on equity dividends. The EU and US proposals are not the same. New proposals will only work in a beneficial way if they help rather than hinder growth in the real economy, and if they are introduced globally in a consistent way rather than in some markets but not others.

31 In all these cases, the critical point is, at a minimum, to preserve the international integration of wholesale capital markets. Retail markets are to a large extent still fragmented along national borders,[34] and there is a strong political interest in consumer protection at national level, where political accountability lies. If new restrictions are imposed by the authorities on wholesale markets with the consequence, whether unintended or intended, of fragmenting them, then there is a question whether the wholesale market would develop offshore, as the Eurobond market did after the IET was imposed in the US in 1963.[35]

Conclusion

32 With the support of its members working in the international capital markets, ICMA will continue to encourage international capital market integration and to do what it can to help prevent capital market fragmentation, engaging with the authorities at national, European and global level.

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33. The European Commission proposal for a Common Consolidated Corporate Tax Base.

34. See Nicola Barr and Aldo Romani, EIB: Europe's First New Global Note: IFLR, November 2006.

35. "The US Interest Equalisation Tax of the 1960s and 1970s, intended to improve the US balance of payments and encourage domestic investment by taxing investment in foreign securities, is a well-known example of the unintended consequences of ill-focused policy, driving the US market in foreign companies' bonds offshore, where it has remained ever since." ICMA: Economic Importance of the Corporate Bond Markets, 2013.