Conference

Investment, Technological Transformation and Skills

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Proceedings

EIB-ECB-SUERF-Columbia-MIT Conference, November 2018: Investment, Technological Transformation and Skills

Proceedings

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The joint EIB-ECB-SUERF-Columbia-MIT conference on 28-29 November addressed policy issues related to investment, technological transformation and skills. It took place at the EIB headquarters in Luxembourg. Some of the main conclusions drawn by speakers were as follows:

- The European economy is faced with several daunting features such as the declining trend in TFP growth despite new technologies, continued low investment in EU versus the United States, declining wage income shares, low return on tangible capital, increasing mark-ups and a skewed profit and productivity distribution across firms, sectors and regions. Europe is no longer represented among the top ranked global universities and firms due to weak public funding and slower diffusion of knowledge. The overall decline in productivity growth is associated with lack of adoption of new technologies in laggard firms and weak framework conditions for firm investment, but is also partly an endogenous response to business cycle conditions.
- In this context, Europe needs to retool its economy if it is not to risk losing its global role. The challenges – in addition to those above - are related to short-term global and domestic risks, reduced political vision, and a lack of skills to face technological change.
- Policy changes are needed inter alia in the fields of skills, firm demographics and to ensure improved incentives and reduced regulatory hurdles in order to promote a greater diffusion of technology and in order for Europe to catch up with the Unites States. Policies should optimise synergies across areas. For instance, income taxes should be made more progressive, antitrust enforcement propped up and ambitious public R&D programs launched. Moreover, social protection will need to be rethought in order to protect workers rather than jobs. The Banking Union, the Capital Market Union, ESM and the fiscal union should be completed to increase resilience.
- Investment finance should be broadened from its focus on bank lending. While accommodative monetary policy has improved the costs and availability of finance, more risk-taking and market and equity finance is needed to share risks, diminish the tight relationship between banks, firms and the sovereign, and to reduce vulnerabilities of corporate indebtedness and NPLs.
- Overall, several speakers expressed rather strong concerns. Like with climate change, it was felt that there is limited time to act.

Day 1

Opening addresses

EIB President Werner Hoyer opened the conference by stressing that Europe needs to retool as the economy is not yet on track and is faced with several challenges and risks. First, growth may continue to slow, despite continued support from monetary policy, and downside risks might lead to a new crisis. These risks are related to rising protectionism, the difficulty of reprising risk in emerging markets given the United States' monetary policy and internal European difficulties (e.g. Brexit). EIB will be strongly affected by Brexit as a contribution of 40bn (enabling lending of 100 bn EUR) from the UK will disappear from the EIB's 600bn EUR balance sheet. Second, for Europe as a whole, a political vision supported in the European Parliament election and strong European leadership is needed to ensure democratic legitimacy, and to find a balance between subsidiarity and solidarity. Third, energy efficiency has to increase fourfold to meet new EU targets. Fourth, according to the EIBIS survey firms perceive the lack of skills to be the most important factor holding back long-term investment. We need a unified digital market in Europe and an ambitious common goal that leaves no one behind with respect to R&D in new technology. More investment of better quality is important in the EU to strengthen competitiveness, integration and cohesion. In 2017 the EIB provided 78 bn EUR of financing, leading to 280 bn EUR of investment. The Juncker plan is also an important sign of EIB's shift from subsidies and grants to guarantees and loans. Overall, Europe has recovered in cyclical terms but now needs to improve structurally.

ECB Vice President De Guindos highlighted the potential productivity benefits – and also the challenges – arising from digitalisation and commented on a few areas where policy changes are needed to promote the greater diffusion of technology. First, education and infrastructure policies promoting entrepreneurship could smooth the transition and mitigate adverse effects on low-skilled workers. These include retraining and lifelong learning opportunities. Second, to encourage the effective diffusion of technology, structural and macro conditions favouring the market entry and expansion of productive firms, as well as the exit of persistently unproductive firms, need to be in place. To ensure a level playing field for firms in the area of new technology, policies are also needed to settle issues of ownership, tax treatment, property rights, competition and product regulation associated with intellectual assets. Reforming insolvency regimes would break the vicious circle of weak banks and zombie firms having an adverse impact on productivity. Finally, more ambitious policies aimed at increasing the supply of private equity, and especially of early-stage venture capital, are needed.

EIB Chief Economist Debora Revoltella summarised the EIB 2018/2019 report,[1] stressing the risks of Europe losing its global role. The key results of the report suggest that investment has recovered to long-term averages, but there are strong differences across regions, with weaker investment intensity in the European periphery than in the centre. While cost of finance is substantially reduced, headwinds are accumulating in terms of the economic, political and regulatory climate, and potential long-term growth remains low. EU's investment gap versus US remains substantial in both machinery and equipment and intangibles. The survey shows that EU has less leading innovators, both among younger and older firms than the US, and that innovating firms are generally more financially constrained. As many as 77% of firms report a lack of skills as an impediment to investment and more innovative firms are even more concerned. 73% of firms provide training, but 21 % of them believe investment in training is not sufficient. Crucial infrastructure is lagging in the recovery due to lack of governance, technological capacity and clear incentives. Other impediments to investment are business regulation (66% of firms) and technical capacity (43% of municipalities). EU also lags in digital adoption, particularly in the service sector (internet of things). The top quantile of the most productive firms that are fully digital perceive that more digitalisation would bring lower competition. In terms of policy messages, EU should focus on retooling by channelling savings toward the most productive use, going beyond national biases, fully using EU instruments (EIB, EU budget), by changing regulatory conditions for firm growth, promoting market entry and exit, addressing EU's 'equity gap', committing to market efficiency, unblocking infrastructure investment and innovation, incentivising all intangibles, not only R&D, enhancing digital skills and by simultaneously addressing competitiveness and social inclusion. The "cost of inaction" is particularly high today, due to the ever faster pace of change and winner-takes-all dynamics of the digital economy.

[1] See http://www.eib.org/en/infocentre/publications/all/investment-report-2018-key-findings.htm.

Panel session I – Investment in Europe: Policies to support competitiveness as a new pulling factor

Chaired by EIB Chief Economist Debora Revoltella

The EU needs more productivity growth, investment and innovation, to prevent that gaps and divergences undermine sustainable growth. In turn, innovation requires reforms to enhance absorption and generate benefits but the reform cycle is long and produces reform fatigue. At the same time the consensus for EU's reform agenda is weakening, again adding to the reform fatigue. Intangible capital raises traditional (e.g. skill policy) and specific challenges. The productivity decline is associated with widening gaps – regional income per capita, inequality within countries, services vs. manufacturing, frontier vs. laggard companies and a digital divide. Such gaps weaken consensus. Looking forward, the reform agenda must be re-adapted to foster inclusion and convergence. As to the frontier/laggard divide, innovation is concentrated in frontier companies and evidence from OECD shows an increasing and persisting gap. Policy challenges relate to re-boosting productivity, supporting convergence and innovation diffusion, defining a tax base for intangibles and to avoiding excessive concentration. The need for support for a structural agenda coincides with support for EU. Also the Single Market needs to advance in the areas of services and innovation.

Micro economic and macro finance, as well as governance, matters for digital technologies. Many European firms have poor access to finance, despite overall benign financing conditions. Governance is also key and efficiency of public investment could improve further. A governance structure exploiting private public collaboration would be positive for the adoption of digital technologies.

There are measurement issues related to intangible investment, distinguishing between computerised information (software, database), innovative property (R&D, mineral exploration, entertainment, design) and economic competencies (branding, firm-specific human capital, organisational capital). In terms of the implications for policies, he proposed to use surveys to get real time data on which investment projects are undertaken; the need for such data is much higher now that measurement has become more problematic.

In terms of the catalyst policies which would address social and economic issues, it was suggested to re-think sectoral policies to optimise synergies and address skills and to focus on a European voice (also for taxes). It was mentioned that cities would be determining polices, but also education locus not only in schools and universities but also in firms. AI and taxation of large firms should be a policy priority and stressed the focus on micro aspects.

Panel session II – Investment finance in Europe – a system fit for growth?

Chaired by Peter Praet, Member of ECB Executive Board

The share of bank vs non-bank financing has shifted to a smaller emphasis on bank financing - from 70% of financing from banks in 2008 to 55% now. Meanwhile, in the US the share is unchanged at 1/3 of total financing. Euro area firms have also become net borrowers, at 2-3% of GDP. As to pricing, thanks to the non-conventional monetary policy, the credit function is now working both in pricing and quantities, as shown by the BLS and the SAFE surveys. However, keeping the policy at low rates for long time could be creating distortions. The ECB’s CBPP and ABS purchase programmes helped to alleviate the financing situation for euro area firms but that there could be some misallocation of savings towards the real estate sector.

The investment finance system in Europe is not fully fit for growth. First, bank stocks have fared worse than overall equities in Europe (and the US), suggesting that European banks are not successfully participating in growth. Second, the increasing government bond holdings by banks over time in the euro area suggest a very tight (and risky) relationship between euro area sovereigns and banks. Third, while there could be a positive loop between healthy banks, firms and the economy, there is also a considerable zombie share adversely affecting banks. Finally, there are potential spill-over effects in terms of productivity gains from reducing zombie capital in Italy and Spain, amounting to 1.2 to 1.4ppt long-term gains in aggregate multi-factor productivity. Looking forward, the Banking Union can support creative destruction to enhance productivity and SSM and cross-border M&A may discipline NPLs. Finally, asset backed securities of packages of SME exposures could widen the spectrum of NFC financing.

There are several key impediments to a well-functioning European financial system. In terms of policy instruments and impediments, taxation is key. As a result of the tax system, favouring debt over equity, European firms are using debt and bank finance as the main external funding source. The drawbacks are clear in a downturn when firms' debt burdens and deleveraging needs undermine investment. As to regulation, the minority investor protection in Europe, with a scope to protect liquid capital markets, may have gone too far. Differences in regulation between banking and securities markets create distortions, encourage arbitrage and spur growth in shadow banking. Other issues are the need for greater proximity between firms and universities, the need for joint public and private engagements in infrastructure investment and governments' commitments not extending beyond electoral cycles.

Progress is needed to improve firms' financing situation in Europe. Firms are relying largely on retained earnings to finance working capital for current production and to finance intangible investment, while collateral for external financing is less available. To make the financial system more efficient and stable, also for firms, the banking union and capital market union should be completed, tax and insolvency regulation should be harmonised, cross-border mergers facilitated and supervision boosted (ring-fencing of capital mobility). There has been too much focus on easy steps. Integration of capital markets would also support resilience and diversity, but systemic risks are not yet reduced. Overly promoting the asset management sector could disrupt primary and secondary markets. Also the balance between debt and equity should be more even, NPLs should be addressed, excess capacity in the sectors reduced and public fiscal sustainability ensured. Finally, it was claimed that cross border mergers would result in more efficient and sounder banks.

There is a need for easier access to financial markets for SME, as they provide 70% of jobs and use financing mostly to finance working capital and less so investment. It is a mistake to split borrowers from lenders, which was claimed would be the result of the Capital Markets Union. Access to equity is important for SMEs when they grow. However, start-ups are only financed through venture capital by a tenth as much as in the United States. The state can also be a catalyst to bringing money, such as French and Italian examples have shown, and banks can promote equity investment into SME by buying minority equity investment. Finally, bigger banks may lower costs for firms and could broker information on companies.

Policy address

Klaus Regling, Managing Director of the European Stability Mechanism (ESM) stressed in his Policy Address the need to complete the Banking Union, the Capital Market Union, and to take additional steps towards a fiscal union to increase resilience. Progress on reducing NPLs are essential preconditions to complete both the Capital Market Union and the Banking Union in the current fragmented financial market, which is characterised by limited risk-sharing as opposed to the case in the United States. A common deposit insurance is an important element in completing Banking Union as well as the financial backstop to the Single Resolution Fund (SRF). The other important topic on the agenda to deepen the monetary union is the ESM. The ESM will provide the backstop to the SRF, play a stronger role in future assistance programmes, review its lending toolkit and plans to improve the framework for debt restructuring. On fiscal instruments, there is a limited need for additional transfers, as they are already provided through the EU budget. However, new instruments for macroeconomic stabilisation and risk-sharing are needed. Support to stabilise investment, a reinsurance of national unemployment systems, and ESM short-term loans are some elements to enhance risk-sharing between countries. A successful further monetary union deepening would also strengthen the euro's global role. In turn, this could give the ECB a more prominent role in providing swap instruments, in a context where the United States may be less willing to support the use of such instruments in the future.

Day 2

Opening

Andrew McDowell, Vice President of the EIB, opened the second day of the conference with some remarks and introduced the keynote Speaker Professor Jean Tirole.

Keynote address

Professor Jean Tirole, Nobel laureate in 2014 and Chairman of Toulouse School of Economics, talked about the future of labour and the university system in Europe. The future labour market is linked to issues of inequality and in particular increased polarisation - as the distribution between high and low paid may increase - as well as a decline in labour share to GDP in all sectors (not only in manufacturing). The principle of neutrality should rule, i.e. the state should not interfere but secure rights and obligations of workers also for new employers (such as Uber). Education and continuous training will play a key role to make future jobs more accessible and attractive. Also social protection will need to be rethought in order to protect workers rather than jobs. The income tax should be made more progressive, antitrust enforcement propped up and ambitious public R&D programs launched.

However, Europe is no longer among the top ranked global universities and firms, and is lacking a Silicon Valley and successful firms like Uber, Netflix, Airbnb and Facebook. This is partly due to Europe being slower in diffusion of knowledge. Europe is also weak on public funding (e.g. DARPA and Bell Labs in the United States produced the major innovations used by technological, pharmaceutical and other companies). Seven guidelines of Common Good Industrial Policy were mentioned: i) use independent experts to select projects and recipients of public funds (c.f. DARPA, ERC, NSF), ii) pay attention to supply side (talents, infrastructure) and not only to demand side, iii) adopt a competitively neutral policy (avoid incumbents, who are winner takes it all), iv) do not prejudge a solution, v) evaluate *ex post* and disseminate the results and use sunset clauses, vi) involve the private sector in risk taking, so as to avoid white elephants, and vii) strengthen universities.[2] Equally important for academic researchers are aspects like the endogenous quality of colleagues and students, compensation, working conditions (lab equipment, limited administrative chores and good technical support), meritocracy and good governance of universities, academic freedom, a positive entrepreneurship and freedom for experimentation.

In this context, a successful initiative is the European Research Council, enabling engagement in European-level research and teaching assessment exercises. Key to success is to harness existing knowledge, to use trustworthy external opinions, e.g. consult top researchers across the world, such as winners of international scientific prices, to help select heads of panels. Lobbies and insiders should be avoided.

Panel session III – Digitalisation and demand for skills

Chaired by Shirin Wheeler, EIB Senior Media Officer

New technology is more important than the Paris agreement, it was argued. While the energy transition is key and a reduction of energy consumption in buildings could be important, the largest challenge is new skills (and training) to adopt existing technology.

[2] France in particular has a dual system for higher education with Universities and les *Grandes Écoles*. The latter are better funded, but still not at the world level, they can select students and have better governance. Universities in contrast are underfunded, have little salary differentiation. Generally in France there is also little interaction between universities and industry, strong dependence on public funds, top down policies, low ratio of project-based funding, low spending on applied research and poor ranking. In contrast, the Unites States has NSF and HIH which have peer reviews, merit-based grants and independent high-level panels.

Many SMEs – perhaps surprisingly - are leaders in 3D etc. Industry 4.0 and the digital transformation are the most important issues as well as new data driven business models. Meanwhile, few companies have fully made a shift to digitalisation (e.g. data analytics, computing) due to a lack of both hard and software skills.

Digitalisation enables firms to get to know customers better but it challenges both products and processes. In the session it was also mentioned that governments need to provide the right infrastructure, such as digital hubs, services, and standardisation. Internet platforms are often difficult and costly to create for small firms, which rather need to liaise with big players like Siemens and Bosch.

Parallel session A1: Digitalisation – the Productivity Puzzle

Chaired by Reinhilde Veuglers, professor in KU Leuven

Speakers noted some puzzling features such as the declining trend in TFP growth despite all new technology, continued low investment in EU versus the United States, declining income shares, low return to tangible capital, increasing mark-ups and skewed profit distribution among firms at the global frontier. New production technologies also challenge economic and legal institutions and individual and societal choices. Adapting the framework of Hopenhayn's (1992) on production technology to account for intangibles (which has almost zero marginal cost) suggests that initial intangible investment generates a productivity drag. With a shift to this technology, total rents increase and the distribution of income becomes more skewed. In terms of policy, it was suggested to stimulate the production of new ideas and new technology, in order to encourage firms' investment in welfare enhancing technology, to encourage socially beneficial aspects of new technology and to allay societal fears about jobs.

The drivers of the slowdown in productivity, are partly an endogenous response to business cycle conditions. Research results - using a DSGE with endogenous technology - show that when output is 1 percent above potential, technological adoption is particularly fast (three times faster than in a recession). While there was a secular decline from the early 2000s, with no recovery after the crisis due to financial constraints, the decline in productivity during and after the great recession appears to be due to an endogenous response of companies to financial and business cycle conditions.

The productivity decline in Europe was characterised by growth in hours worked, while value added was weak in some countries. There was a general slowdown in demand across many sectors and an increase in productivity only in a few small sectors like the auto sector and utilities. The most digitised sectors also saw higher revenue, share growth, profit and margin growth, productivity and wage growth. Europe has a scale issue rather than problems with research, start-up procedures or knowledge and speed is key.

It is well-known that in firms with both low and high digital intensity industries, the frontier firms outperform other firms in terms of productivity. Moreover, the speed of catch-up across firms has declined over the last 20 years, even more so in digital sectors. Key elements for adopting digitalisation is complementarity, also associated with managerial and skill upgrades. Skill shortages curb the returns from digitalisation, though they do not matter for digital adoption in the most productive firms. A package of policies would be needed in Europe aiming at increasing capabilities and financing, improving the access to skills and boosting incentives in competitive markets.

Europe is looing the technological battle. Vis-à-vis the United States there is a gap in financing (long-term and risky), and not a sufficient bridge between research and the market. Trust, governance and risk taking are key for Europe.

Parallel session B1: Skills - What causes the gaps ın the EU?

Chaired by Jan Svejnar, Director of the Centre on Global Economic Governance, Columbia University

With regard to the decline of Europe in the face of globalisation, improving labour market functioning, e.g. through mobility and recruitment practices, offers a way to counter rising Euroscepticism. Skill development and on the job training are policy options, but at the same time, they are costly for both parties, employers and employees. Moreover, There are also problems with persistent labour underutilisation and suggested that virtual working may increase the efficiency of the labour market. Lastly, further mobilisation of resources and a pro-active approach to talent management are necessary to reduce skills mismatch (e.g. the dual vocational education system is Germany and talent conferences in China).

While there is considerable uncertainty about what skills exactly will be needed in the future, an adaptable education system, on the job training and flexible labour markets represent ways to

facilitate adjustment. Research finds that on the job training can help to improve basic literacy and numeracy skills, suggesting some substitution between formal schooling and on the job training, which can help to upgrade skills later in life.

There is a lack of comprehension of the right skills to perform tasks and training requirements. This contributes to reluctance to invest in on the job training by employers and employees (hold up problem). To overcome this problem, private and public parties should collaborate in their investments regarding training and education.

The standard notion of skill gaps is often not sufficiently backed by data. The main challenge does not come from technological changes but from lack of adequate institutional and organizational settings in the labour market (e.g. skill gaps due to information gaps). In order to solve this problem we need the coordination of different actors; individuals, employers, government and private institutions and NGOs (e.g. MIT Skillscape Project).

Parallel session C1: Macroeconomic benefits – moving towards more market-based finance

Chaired by Karel Lannoo, CEO at the Centre for European Policy Studies

The role of market-based finance in the Euro area is growing, particularly through the reduction of the share of the banking system and an increase in that of non-regulated finance (investment funds). **However, the evolution of financial integration is still a bit scattered and partly cyclical, resulting from the deleveraging taking place in the banking sector.** There has been an improvement in prices, with monetary policy being able to restore a convergence in lending interest rates, but less evidently so in terms of quantities. In fact, cross border flows are still quite low. In addition, while cross border equity holdings has been rising in the last years, cross border debt holding has been declining.

Capital inflows into CEE have started to recover but remain below pre-crisis and Euro Area levels (as a % of GDP). There has been a wide increase in 2017 in Czech Republic and Slovakia, but not a generalized re-integration. Before the crisis there was a wide inflows due to cross-border banking acquisitions that after the crisis was partially reverted, and inflows were more focused on debt securities, while after 2009 cross border equity investment has been more frequent. Bank funding is more procyclical than other forms of investment and, specifically looking at Croatia, the lending activities of the foreign banks in the country are more procyclical than that of local banks. Finally, equity market portfolio flows are still a tiny part of total inflows.

Cryptocurrencies should not be considered a fancy curiosity. The technological evolution that accompanies them suggests that they can actually enlarge the tools available for Central Banks and for monetary policy.

The EIB and the EIF are addressing the issue of enhancing market-based finance in Europe. While access to finance is not a huge issue anymore, equity capital is definitely too low. There are still issues regarding SMEs, early stage and micro-finance; in order to reach the widest possible number of SMEs EIB acts collaborating with commercial banks. But on equity the fragmentation of the market is still wide and the result is that Europe is 5 times behind US in providing early stage finance, 20 times below the US level in the growing stage. On that the EIF is trying to act, and also, not directly related to market failures, on enhancing the presence of European firms in sector that may shape the innovation system of the future.

Parallel session A2: Digital Transformation – Enablers and Consequences

Chaired by Reinhilde Veugelers, Professor in KU Leuven

Europe needs to develop solutions for digitalisation in line with European values by design. In turn, this will strengthen European values and create a counterbalance to global digital competition. The skills gap in combination with technology scepticism is identified as a barrier for digital transformation, especially for SMEs. More specifically, there is an innate resistance to change identified in our culture which adversely effects digital transformation in the EU. Collaboration amongst firms at the pre-competitive level can enable digital transformation; by building broadly based networks digital transformation can be collaboratively encouraged.

Digital transformation is not just about technologies but also about business models. By stepping away form more linear value chains and using circular models such as the circular value network, digital transformation can be enabled. Blockchain is identified as an enabler of digital transformation. Open source technology will also encourage digital transformation whilst at the same time mitigating against competition concerns.

Communication networks are an enabler of digital transformations. By building a solid communications infrastructure, more information can be moved around enabling a Smart Nation. Blockchain is again identified as an enabler of digital transformation. Investment into human capital and encouraging entrepreneurship is also an enabler. Investment and support for Deep Tech companies is a priority for enabling the digital transformation in Singapore.

Adequate digital infrastructure and digital skills are enablers for the EUs digital transformation. The telecom sector is an enabler of digital transformation. More investment is needed in European Broadband, with broadband coverage still lacking in many areas. There is a high disparity in broadband access between countries, and within EU countries in urban and rural areas. In order to overcome the digital skills mismatch, investment into educational training is required. A lack of basic technical competencies further hinders digital transformation across Europe. Companies identify shortages in organisational skills and digital skills whilst demand for ICT specialists is rising. The need for constant retraining and adapting to new technologies by the work force to keep up with digital innovations is also a necessity. Currently, the EU lags behind economics such as the US and Japan. To enable Europe to catch up, adequate investment into digital infrastructure such as high speed internet connections and educational training is needed.

Parallel session B2: Skills in the CESEE Region

Chaired by Jan Svejnar, Director of the Centre on Global Economic Governance, Columbia University

Skills in the CESEE region are critical for mid and long term growth, but there are also substantial demographic challenges (e.g. aging population and its negative effect on size of the labour force and productivity, relative low participation rate, lower pensionable ages). Robots can be part of the solution and help to increase the capital stock and productivity at the same time. However, the right skill sets in the workforce are needed to make robots complementary rather than substitutional. Higher access to education, training and lifelong learning are essential to improve labour market efficiency.

Human capital (including education and health) is important for productivity. The World Bank's new Human Capital Index places four Asian countries at the top of the ranking, Singapore, Japan, Korea and Hong Kong. In the next 16 places of the ranking, there are 14 European countries before the US. It shows us that the success of the US does not come from the US education system, but through importing European researchers and educators to the US. Even though the CESEE countries are lagging behind, most are still doing well in the index relative to their income per capita. But there are still demographic challenges faced by the EU such as an ageing population, income inequality, job and education opportunities, and technological transformation stressing the need to step up investment in human capital. The main conclusion of the presentation was that Europe should not copy the US or China but policies should be specific to the EU.

There are skill shortages in the CESEE region and these are particularly acute for the skills most needed in the future. The results of EBRD and EIB surveys highlight the inability to access the right people with right skill sets, heterogeneity in years of schooling and uneven quality of education across European countries. These challenges are due to lack of ICT skills in the older workforce, low labour force participation rate after the age of 50, emigration and decrease in productivity levels.

It was concluded that the gaps that can be observed are more structural than cyclical, and that the role of wage adjustment mechanisms should be stressed.

Parallel session C2: Understanding impediments and incentives to foster EU equity base

Chaired by Karel Lannoo, CEO at the Centre for European Policy Studies

The EU's financial market without UK will be small in comparison to the United States. Still, market capitalisation to national GDP is higher in Denmark, Ireland and the Netherlands than in the United States and the United Kingdom. Lack of equity is an issue: for instance insurance companies and pension funds have reduced their exposures to equity from 40 to 10% over past decades. Funding bias towards debt has resulted in the corporate sector in EU being heavily indebted. As to policies, the bias towards debt should be neutralised. On the demand side, pension funds at EU level could increase demand for equity. Also investment savings accounts, already used in Sweden, Denmark and 9 other countries could get people more acquainted with equity.

There should be more initiatives from governments and working groups to make firms more involved in listed markets. Firms need more long-term funding and more discussions with asset managers on projects, business plans and financing needs. There are in fact already plenty of sources of private equity. The issue is rather to bring value added and to be highly reactive, than to bring money.

Information requirements are more stringent for equity than for lending (growth matters here) and that firms might need different funding sources depending on the lifecycle of the company (startup, scale up or consolidation phase). Financial instruments may in themselves develop technologies for information processes, such as platforms, networks and information processing and multilateral trading facilities. While the Capital Market Union will favour this process of integration and standardising of procedures, it is also necessary to have a critical mass of listings as well as liquidity and to remove national differences in terms of tax listings and disclosure procedures. Fintech is also crucial in this context, as more competition will reduce access costs. However, regulation of Fintech is heterogeneous in the EU.

Instead of financial institutions providing both lending and equity, firms could be general partners and bank limited partners (offering either equity or lending to individual firms). It was also suggested that the regulation should be shifted from banks not losing money to banks earning money. The difficulty in creating a single platform for Europe is related to cost, while Nasdaq has lower fees.

Panel Session IV - The EU competitiveness challenge: What lessons for policy?

Chaired by Andrew McDowell, EIB Vice President

There is a mismatch of skills rather than a lack of skill. For new Member States, the demographic challenge – emigration - is very strong and the labour force is shrinking. This could in turn lead to dramatically rising wages.

There is increasing heterogeneity across countries, sectors and firms and that the adoption speed is slowing. Catching up in productivity with the frontier firms is a challenge for policy where one needs to address capabilities and incentives to improve adoption. Market for knowledge should also be better developed to reduce fragmentation. As to best practises, access to skills and finance and sharing of knowledge within value chains or regions and cities, creating long-term incentives, are very important aspects.

There is a need for financial literacy and to overcome Europe’s bank dependency at the benefit of equity. There is a policy failure in that the EU has limited venture capital, is very risk avert and lacks escalators to grow. There is also a tax bias towards debt and lack of financial integration. Europe also needs more initiative to develop markets in emerging markets and the promotion of long-term investors (e.g. pension funds in the Netherlands, Sweden and Denmark).

Being at the top may not be the most important aspect, but rather a focus on distribution and to have reasonable productivity. The United States is too concerned about China’s attempts to dominate in the domain of new technologies.

Larger firms as that would give additional synergies and productivity. The emerging markets are about five 5 years behind the rest of Europe and they risk “growing old before becoming rich”. Aging in the West is mitigated by migration from the East, which also mitigates the problem in the East. Interestingly, in contrast to the West, where people work longer, in the East labour participation is declining due to health aspects. Robotisation would be a solution both in the East and the West but the East is behind.

Closing address

Ambroise Fayolle, Vice President, European Investment Bank gave the closing address. He notes that the EIB has a key role in addressing market failures and structural needs that would not otherwise be addressed by the market – including in innovation. The Bank offers a wide range of products to support companies from the seed, to early-stage, to growth and expansion phases. It is able to finance innovative SMEs and take significant risk, with much smaller targeted tickets thanks to the Juncker Plan / EFSI.

Lessons from the conference: that it is not only important to invest more, but also to invest wisely and to create the right conditions for investment to take place. Market inefficiencies not only directly influence firms' investment decisions; they also indirectly weaken the adaptability of the economy to technological change.

So while we have achieved a lot in Europe, we still have many challenges ahead of us. The EIB remains committed to this process, to serve the needs of its clients, and to fully realise the great potential there is in Europe, if we work together and invest in the future.