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Inequality and Europe 2020

The European Commission put forward its strategy for the 2010-2020 period in its Europe 2020 Communication. Inequality should be seen as a cornerstone of both sustainable and inclusive growth. In fact, unequal societies are also more unstable societies (i.e. unsustainable) and more polarised (i.e. exclusive). The analysis of available data and the established consensus in the literature shows four main stylised facts.

According to the latest Eurostat data, the population at risk of poverty or social exclusion in the EU27 (we do not consider Croatia because of the lack of data prior to the crisis) reached almost 123 million people in 2012, up by almost 8.5 million compared with the trough in 2009. The target defined in the Europe 2020[1] strategy says that the number of people at risk of poverty or social exclusion should be reduced by 20 million. This is an ambitious target and it is certainly worth pursuing in an area of the world where, despite recent turbulence, it has been possible to establish inclusive, less violent and more stable societies.

Fighting inequality is a fundamental cornerstone of reaching this target. On the one hand, inequality is strictly intertwined with (relative) poverty. According to Eurostat data for 2012, the correlation between the rate of individuals at risk of poverty in the population and the Gini coefficient for net household disposable income is very high (0.71) and the correlation is very robust (around 0.70 in 2007).

On the other hand, the fight against inequality should be seen as a key milestone of the Europe 2020 strategy, i.e. a fundamental instrument to reach smart, sustainable and inclusive growth. In fact, while inequality has usually been blamed for its societal effects, e.g. inducing higher crime rates or worse health outcomes,[2] inequality also has negative effects for the economy itself.

In the short run, higher inequality encourages higher levels of debt, because consumption patterns tend to show much more inertia than income patterns. The gap between the Gini coefficients of income and of consumption increased in most countries in the pre-crisis period. In the USA, the gap between the two Gini coefficients was 0.01 in the 1980s, and it rose to 0.05 in 2004.[3] Access to debt, in the presence of the difficulties of implementing thorough screening, will result in a dangerous vicious cycle: unsustainable dynamics of asset prices, financial bubbles, weakening of the financial sector, the need for the state to take charge of the financial sector, pressure for financial consolidation, cuts in expenditure and public services, and subsequent further inequality increases.

According to Eurostat data, in the pre-crisis period (2000-2007), private debt increased by 36 percentage points of GDP in Italy, by 49 points in Greece, by 93 points in Spain, by 67 points in Ireland (2001-2007), by 52 points in Portugal, and by 60 points in Cyprus, all countries with troublesome financial situations.[4]

1 European Commission: Europe 2020. A Strategy for Smart, Sustainable and Inclusive Growth, COM(2010) 2020 final.

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2 R.G. Wilkinson, K. Pickett: The Spirit Level: Why More Equal Societies Almost Always Do Better, London 2009, Allen Lane.
3 D. Krueger, F. Perri, L. Pistaferri, G.L. Violante: Cross Sectional Facts for Macroeconomists, in: Review of Economic Dynamics, Vol. 13, No. 1, 2010, pp. 1-14. The pattern is generalised, as shown by F. Bogliacino, V. Maestri: Increasing Income Inequality? in: W. Salverda, B. Nolan, D. Checchi, I. Marx, A. McKnight, I.G. Toth, H. van de Werfhorst (eds.): Changing Inequalities and Societal Impacts in Rich Countries: Analytical and Comparative Perspectives, Oxford 2014, Oxford University Press.
4 Eurostat: Macroeconomic Imbalance Procedure Indicators, tipspd series.

In the long run, inequality may hamper the incentives to invest in education and other assets, lowering growth potential. It has been argued that the persistence of poverty might be due to internal constraints adding their negative effects to those of external ones.[5] In other words, more unequal societies are also polarised societies, where the poor not only lack access to credit and public services but also may lack *the capacity to aspire*,[6] since social mobility becomes less and less easy to accomplish. Indeed, according to the OECD, the ranking of countries in terms of intergenerational mobility mimics that of inequality.[7]

Finally, pointing out the importance of inequality means also addressing its various dimensions. While the Gini coefficient can capture the change in distribution affecting the middle class, it is less sensitive to changes occurring at the two tails. A 2010 study on top income shares showed that in many countries the increase of inequality at the top has been sizable.[8] In the last three decades, the same increase even occurred in countries in which the Gini coefficient was stable or declining.[9]

A small number of people appropriating a large share of income could lead to a distortion of the incentives, inducing rent-seeking activities by those at the top and putting pressure on the democratic system. The waste of resources dedicated to lobbying activities by the wealthy to promote changes in regulations and legislation to protect their wealth has been denounced by many scholars.[10]

The policy instruments

Europe 2020 created seven flagship initiatives as channels towards the accomplishment of the strategy's main targets. Smart growth is pursued through initiatives oriented towards research and innovation (Innovation Union, Youth on the Move, A Digital Agenda for Europe).

5   D. Mookherjee: Poverty Persistence and Design of Anti-Poverty Policies, in: A.V. Banerjee, R. Bénabou, D. Mookherjee (eds.): Understanding Poverty, Oxford 2003, Oxford University Press.
6   A. Appadurai: The Capacity to Aspire, in: V. Rao, M. Walton: (eds.): Culture and Public Action, Stanford 2004, Stanford University Press.
7   OECD: Growing Unequal? Income Distribution and Poverty in OECD Countries, 2008: Figure 8.1. The data refer to the intergenerational elasticity of earnings, a measure of persistence across generations.
8   A.B. Atkinson, E. Saez, T. Piketty: Top Incomes in the Long Run of History, in: Journal of Economic Literature, Vol. 49, No. 1, 2010, pp. 3-71.
9   F. Bogliacino, V. Maestri, op. cit.
10 J.E. Stiglitz: The Price of Inequality, New York 2012, W.W. Norton & Co.; P. Krugman: End This Depression Now, New York 2012, W.W. Norton & Co.; R. Reich: Supercapitalism, New York 2007, Vintage Books.

Sustainable growth is pursued through competitiveness and resource efficiency (Resource Efficient Europe, An Industrial Policy for the Globalization Era). Finally, inclusive growth is pursued through initiatives in the labour market and on social exclusion (An Agenda for New Skills and New Jobs, European Platform against Poverty and Social Exclusion).

The main communications identify priorities and actions, and define intermediate steps and a very detailed strategy of measurement. The key instruments can be summarised as:

• improvement of enablers of innovation (human capital, financing and various specific forms of infrastructure);

• strengthening protection of intangible assets (research and development and patents);

• further pursuing the single market;

• emphasis on industrial modernisation through new sectors, knowledge intensive activities, highly innovative SMEs and resource efficiency;

• smart specialisation as an instrument to improve cohesion and spread benefits of growth across regions.

These activities are complemented by the actions taken on the labour market and social exclusion fronts. With regard to the former, the main emphasis is placed on the creation of new skills and on a more efficient matching between skills and tasks.

The strategy against social exclusion is based on a life cycle approach, with specific initiatives for children, the working age population (oriented towards access to employment) and the retired/elderly. Additional effort is envisaged for the specific needs of migrants and minorities.

Expected consequences

The labour market effect of innovation

There are various channels through which innovation impacts on the distribution of income.

First of all, in the economic literature there has been much debate on the employment effect of innovation. Unemployment is a factor that contributes to inequality, and thus technological unemployment, i.e. unem-

ployment resulting from technological innovations, may worsen the income distribution. The likelihood of technological unemployment has been studied with specific emphasis on process innovation: firms introducing new machinery are pushed by the need to save on the most expensive production factor (i.e. labour). At the firm level, the impact on employment is positive, since an individual company can grow at the expense of its competitors, but at a more aggregate level the impact is, in principle, uncertain.[11]

However, this is a direct effect: once the innovation has been introduced, prices will move downwards, contributing to the expansion of demand (both for the good itself and for labour); moreover, those who enjoyed extra rents will increase expenditure or investment, contributing to the reabsorption of the workforce expelled. The functioning of these compensatory mechanisms is complex and the final outcome is essentially an empirical issue, although most of the literature indicates that the estimated impact is positive.[12]

We should mention that the Innovation Union is more focused on the generation of new technology (new products, R&D, etc.) than on adoption, and in this case the impact is deemed to be positive.[13]

However, innovation is also related to other distributive variables: rents accruing to individual firms will contribute to the enlargement of the capital share, which was one of the main forces behind the increase of inequality in the decade between the mid-1990s and the mid-2000s.[14] Nevertheless, the relationship between changes in the labour share and R&D intensity is flat and not statistically significant at the aggregate level, as shown in Figure 1.[15]

Figure 1
Relationship between average R&D intensity and the change in labour share, 1990-2007

Note: Germany and Hungary: 1992; Czech Republic, Estonia, Greece, Poland, Slovak Republic and Slovenia: 1995; Canada: 2004; Korea and Portugal: 2005; Japan, Poland and Slovenia: 2006.

Source: OECD MSTI and OECD calculations based on OECD STAN and EUKLEMS.

Finally, there is a sizeable literature investigating the role of innovation in shaping the distribution of wages. The consensus in academic circles is that technical change has created an increase in the demand for skills. The OECD estimates R&D intensity has a positive effect on the differential between the ninth and the first deciles of earnings, after controlling for a number of other determinants.[16] Various theories have been proposed to justify this stylised fact.[17] Using data from Eurostat, it can be seen that countries with higher R&D intensities tend to have a reduced share of low wage jobs (see Figure 2).[18] However, the graph shows a large cluster of countries for which R&D intensity is low and whose labour market structures are quite different from one another, suggesting that the main determinant lies elsewhere. A review of the literature discussing the econometric evidence on the impact of technology on the relative demand for skilled workers concludes that the evidence of an in-

11 J. Van Reenen: Employment and Technological Innovation: Evidence from U.K. Manufacturing Firms, in: Journal of Labor Economics, Vol. 15, No. 2, 2007, pp. 255-84; F. Bogliacino, M. Pianta: Innovation and Employment: A Reinvestigation using Revised Pavitt classes, in: Research Policy, Vol. 39, No. 6, 2010, pp. 799-809.
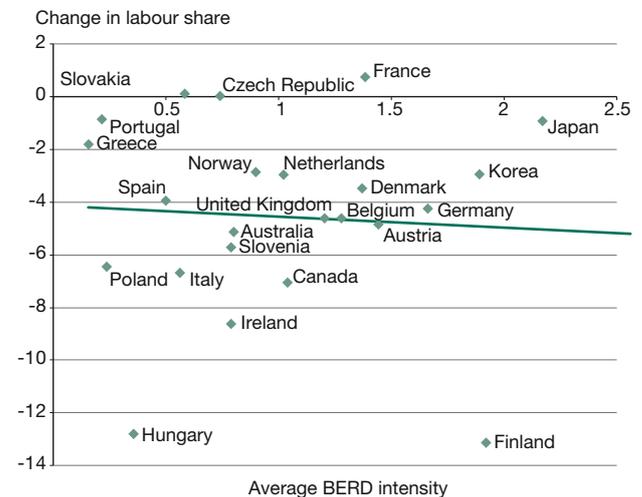
12 L. Chennels, J. Van Reenen: The Effects of Technical Change on Skills, Wages and Employment: A Survey of the Micro-Econometric Evidence, in: N. Greenan, Y. L'Horty, J. Mairesse (eds.): Productivity, Inequality and the Digital Economy, Cambridge, MA 2002, MIT Press.

13 F. Bogliacino, M. Vivarelli: The Job Creation Effect of R&D Expenditures, in: Australian Economic Papers, Vol. 51, No. 2, 2012, pp. 96-113.

14 OECD: Divided We Stand: Why Inequality Keeps Rising, OECD Publishing 2011.

15 The slightly negative coefficient is probably driven by Finland acting as an outlier, but there is no statistical significance in the relationship. The data on labour share come from the OECD database; there is some variation in the timeframe but these data are comparable and consistent with results from other data sources.

16 OECD: Divided We Stand …, op. cit.

17 D. Acemoglu: Technology and the Labor Market, in: Journal of Economic Literature, Vol. 40, 2002, pp. 7-72; D. Acemoglu, D.H. Autor: Skills, Tasks and Technologies: Implications for Employment and Earnings, in: O. Ashenfelter, D. Card (eds.): Handbook of Labor Economics, Vol. 4B, Amsterdam 2011, North Holland.

18 Eurostat: Science and Technology Indicators, rd_e_gerdtot series; and Eurostat: Labour Market Indicators, earn_ses_pub1s series.

Figure 2
Average R&D intensity (1995-2006) and share of low wage earners in 2006
% of total employees
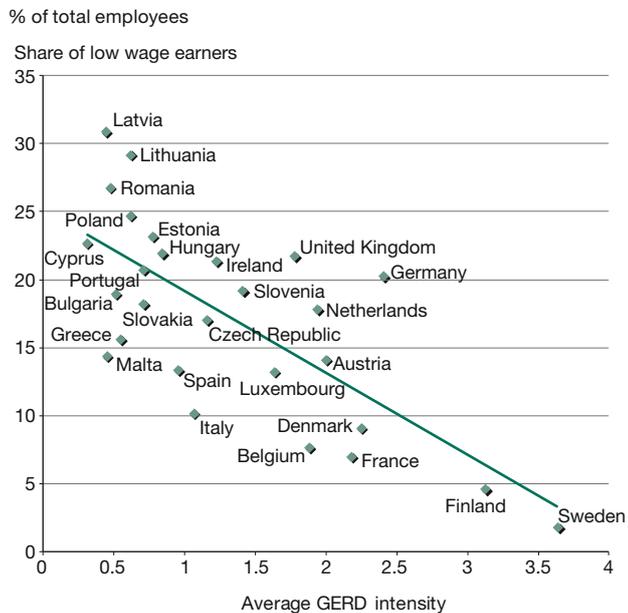
Source: Eurostat: Science and Technology Indicators, rd_e_gerdtot series; and Eurostat: Labour Market Indicators, earn_ses_pub1s series.

Figure 3
Variation in graduates (ISCED 5-6) versus change in D9/D1 of gross earnings (2000-2010)
per 1000 population

Note: For ISCED, Italy (2000-2008); for D9/D1, Austria (2004-2010), Estonia (2002-2010), Greece (2004-2010), Spain (2004-2010), Netherlands (2002-2010), Poland (2005-2010), Portugal (2004-2010), Slovak Republic (2002-2010).

Sources: D9/D1 from OECD database; ISCED 5-6 graduates from Eurostat.

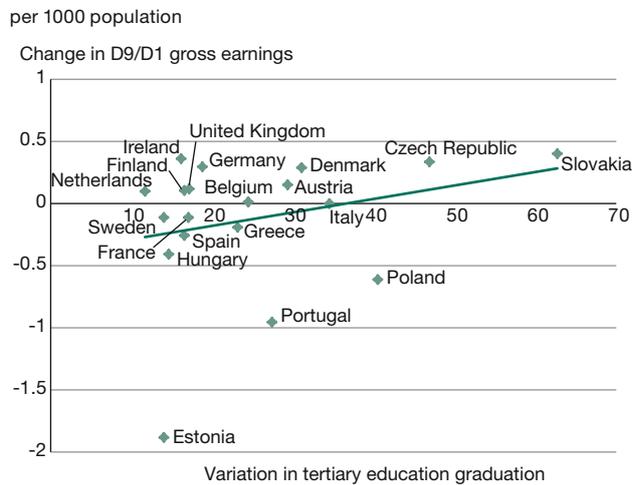equality effect of technology is a robust cross-country stylised fact.[19]

The Europe 2020 strategy identifies the increase in the supply of skills as a fundamental instrument with which to contain disequilibrium in the labour market.[20] The rationale is that this increase will contain the effect of technology on wages. However, across OECD countries, while inequality in educational attainment has decreased and the output of the educational system has increased everywhere,[21] this has not been able to contain the dynamics of increasing wage inequality. In Figure 3, we plot Eurostat data regarding the change in the tertiary education (ISCED 5-6) per thousand population aged 20-29 and OECD data for the change in D9/D1 of earnings. As shown, when we calculate the relationship between the two variations, the coefficient is slightly positive (and most likely not statistically significant), confirming that education alone cannot be enough to offset the demand shift generated by research and innovation.

The risk of concentration

The improvement of protection for intangible assets is one of the core actions of the smart growth strategy. The European Commission stresses the need for a single market for ideas and a harmonisation of national rules, including stronger enforcement of Intellectual Property Rights (IPR) rules.[22] It also claims that the more effective "assignment, management, and use of intellectual property rights are the key to unleash the R&D and innovation efforts that are crucial for lasting competitiveness. Moreover, the assignment of these rights must go hand in hand with effective enforcement."[23]

Although harmonisation is necessary for a common business environment, the further strengthening of IPR protection may prevent cohesion among different areas. Intangible assets can also be used as tools to build barriers to entry (a patent is a monopoly), and the evidence of innovation persistence is overwhelming.

19 L. Chennels, J. Van Reenen: The Effects of Technical Change …, op. cit.
20 European Commission: New Skills for New Jobs Anticipating and Matching Labour Market and Skills Needs, COM(2008) 868, 2008.
21 G. Ballarino, M. Bratti, A. Filippin, C. Fiorio, M. Leonardi, F. Scervini: Increasing Educational Inequalities? in: W. Salverda, B. Nolan, D. Checchi, I. Marx, A. McKnight, I.G. Toth, H. van de Werfhorst (eds.): Changing Inequalities …, op. cit.

22 European Commission: Europe 2020 Flagship Initiative, Innovation Union, COM(2010) 546 final, 2010; An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage, COM(2010) 614, 2010.
23 European Commission: An Integrated Industrial Policy for the Globalisation Era …, op. cit.

Table 1
Dependent variable: R&D per employee in log scale

|	(1) GMM-SYS	(2) GMM-SYS
First Lag	0.907	0.907
	[0.036]***	[0.036]***
Distance from the frontiera	-0.100	
	[0.058]**	
Distance from the frontierb		-0.133
		[0.060]**
Operating Surplus per employee in log scale	0.105	0.107
	[0.046]**	[0.046]**
const.	1.098	1.128
	[0.519]**	[0.523]**
Time dummies	Yes	Yes
N Obs	1793	1793
Hansen	32.74	32.99
p value	0.624	0.613
AR(1)	-3.90	-3.90
p value	0.000	0.000
AR(2)	0.13	0.13
p value	0.894	0.893

Notes: Robust standard errors in brackets. GMM-SYS indicates the technique of estimation (Generalized Methods of Moments). First Lag stands for the lagged value of the dependent variable, a and b: distance to productivity frontier estimated through two alternative econometric formulations, respectively as a residual from a Cobb Douglas production function and a Translog production function. *, ** and *** indicate significance of 10, 5 and 1 per cent respectively.

Sources: OECD ANBERD and STAN, data at 2 digits ISIC code. Countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Portugal, Spain, Sweden and United Kingdom, 1996-2005.

As a matter of fact, the number of patent applications in each country is remarkably persistent across years, as shown in Figure 4. The reason for this is "increasing returns". Technological trajectories are shaped by the accumulation of capabilities by individual agents and organisations. Entry and leapfrogging are likely in activities where the innovative domain is simple, whereas in sectors where the scientific content is significant they are very rare. In most cases, innovative trajectories are built across several years and show a robust cumulative pattern.[24]

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24 M. Cimoli, G. Dosi, J.E. Stiglitz (eds.): Industrial Policy and Development. The Political Economy of Capabilities Accumulation, Oxford 2008, Oxford University Press.

Figure 4
Patent applications, 2007 and 2000
per million labour force
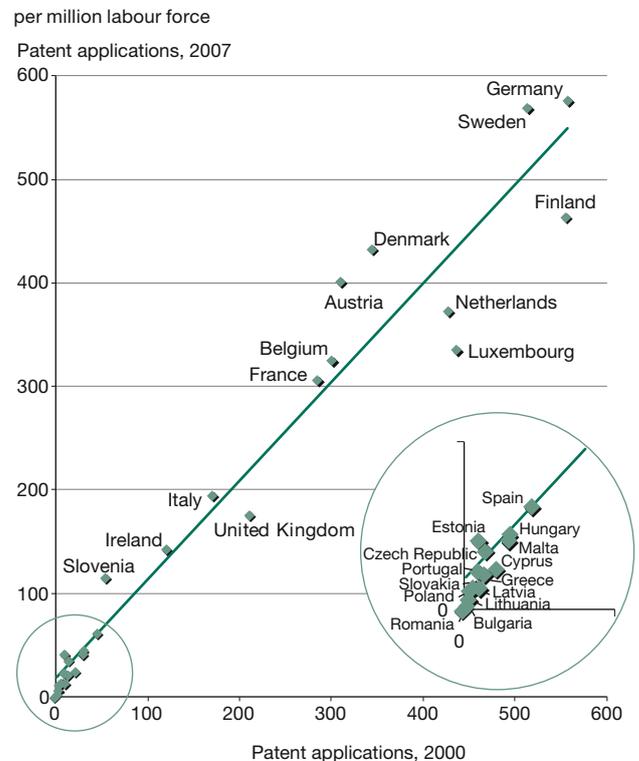
Source: Eurostat.

In Table 1 we report the results of an econometric regression in which the industrial R&D intensity for 15 European countries is regressed over a measure of capabilities (estimated as the distance from the productivity frontier).[25] The table shows two main results: a one percentage point increase in the distance from the frontier reduces R&D intensity by 0.1%. The coefficient is similar to that of internal sources (operating surplus) that captures the problem of access to finance for innovative activities. As a result, countries and sectors that lag behind end up trapped in the dynamics of poor innovative performance instead of catching up.

In the presence of this persistence, further strengthening of IPR is likely to induce an even higher level of innovation across regions and countries. If this is the case, inequality will increase as a result of a deepening of product per capita differences.

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25 This is a replication exercise from F. Bogliacino, C.S. Gómez: Capabilities and Investment in R&D: An Analysis on European Data, in: Structural Change and Economic Dynamics (forthcoming). For a discussion of robustness of data, methodology and further results, see the original paper.

The Commission anticipated this risk and proposed a counterbalancing strategy based on *smart specialisation*, a way to promote cohesion and to level the playing field. However, implicit in the idea of smart specialisation is an assumption of symmetry across sectorial activities. This is not necessarily the case, given that different sectors are associated with technological trajectories at different levels of maturity, different paces of productivity growth and, inevitably, different time profiles of wage growth.

In accordance with this principle, policies oriented towards enablers are certainly necessary, but given the time needed for the private sector to catch up, it is very unlikely that a less uneven landscape will be reached within a reasonable time window unless strong commitment by the public sector is guaranteed (e.g. in public research with freely available results).

The financing conundrum

Financing of innovation is a fundamental bottleneck. The high level of risk of innovative activities and the likelihood of failure complicate companies' access to adequate collateral or to financial agents willing to bear (part of) the risk.[26] Moreover, innovative SMEs are usually hit harder by credit crunches and other financial turbulences that increase the risk aversion of lenders.[27] Table 1 suggests that the availability of internal resources significantly increases the likelihood of investment in innovation. This evidence is confirmed with robust econometric techniques based on company level data.[28]

The "dot-com" bubble and the Silicon Valley success story contributed to the consensus that venture capitalists (VCs) and high level engineering departments were the only necessary ingredients for the success of innovative clusters. Nevertheless, the engagement of the public sector in creating basic technological breakthroughs on which high tech clusters were based has been substantial.[29] While it has been commonly asserted that US R&D growth in the 1990s was driven by a stock market boom,[30] this is not necessarily the full story. Indeed, data from the European R&D Scoreboard shows that listed SMEs are not more research intensive than unlisted ones;[31] furthermore, despite huge tax breaks and other financial support, the venture capital market in the USA underwent a rapid reorientation of business after the dot-com bubble burst in 2001 and then suffered a collapse during the financial crisis of 2008, suggesting that rather than a pure problem of financing, the VC size may be due to structurally limited niches.[32]

From the point of view of inequality, the emphasis on financial deepening and financial innovation raises a number of worries. First of all, firms' growth seems to be correlated with a complex array of factors, and neither innovation nor stock market performance alone are good predictors.[33] As a result, given the focus of VCs on stock market returns, this channel of financing does not necessarily promote employment creation and reduction of inequality.

Moreover, the strong involvement of investment banks, VCs and other powerful financial actors may induce orientation towards value extraction, e.g. maximisation of shareholder value and other forms of short termism. The establishment of this philosophy of corporate governance has paved the way to massive use of stock buybacks and executive compensation practices that significantly contribute to the increase of top income shares and the widening of inequality.[34]

The single market: opportunities and risk

The European Union has often emphasised that the single market is the main asset of member states and that further steps towards effective integration are necessary. The EU28 is the largest world market in terms of GDP, but regulatory differences across member states are substantial, as stressed by a number of official documents by the European Commission.[35]

Furthermore, structural imbalances inside Europe are deep, especially in the euro area, and these can also generate higher levels of inequality. Resilient differences in competitiveness between Central European coun-

26 B. Hall: The Financing of Research and Development, in: Oxford Review of Economic Policy, Vol. 18, 2002, pp. 35-51.
27 FINNOV: Do Financial Markets Reward Innovation?, Policy Brief No. 1, 2010.
28 M. Cincera, J. Ravet: Financing Constraints and R&D Investments of Large Corporations in Europe and the US, in: Science and Public Policy, Vol. 37, No. 6, 2010, pp. 455-466.
29 M. Mazzucato: The Entrepreneurial State, Demos, London 2011.
30 J. Brown, S. Fazzari, B. Petersen: Financing Innovation and Growth: Cash Flow, External Equity, and the 1990s R&D Boom, in: Journal of Finance, Vol. 64, No. 1, 2009, pp. 151-185.

31 F. Bogliacino, M. Lucchese: Access to Finance for Innovation: The Role of Venture Capital and the Stock Market, in: Economia E Politica Industriale, No. 4, 2011, pp. 165-183.
32 FINNOV: Dynamics of Financial Bubbles? Policy Brief No. 2, 2011.
33 P. Demirel, M. Mazzucato: Innovation and Firm Growth: Is R&D Worth It?, in: Industry and Innovation, Vol. 19, No. 1, 2012, pp. 45-62.
34 A.B. Atkinson, E. Saez, T. Piketty: Top Incomes …, op. cit.; W. Lazonick: The Explosion of Executive Pay and the Erosion of American Prosperity, in: Entreprises et Histoire, Vol. 57, 2010.
35 European Commission: Europe 2020 Flagship Initiative …, op. cit.; An Integrated Industrial Policy …, op. cit.; Europe 2020 …, op. cit.

tries, such as Germany, and the "periphery" (e.g. Spain, Portugal, Greece and Ireland) created an unsustainable path in the latter member states. In fact, current account deficits caused massive financial inflows, cheap and easy credit, and asset price bubbles. Instead of financing innovation to encourage future current account surpluses, the inflows of capital inflated asset prices, putting the financial system under pressure.

Asset price inflation can be considered as a substitute of risky and costly innovative investment, distorting incentives. In fact, massive inflows of capital (driven by current account deficits) are associated with an increase in top income shares. We compare available data from the Top Income Database regarding the change in the share of income earned by the top one per cent since 1980 with data from the IMF World Economic Outlook Database on average current account balances for the same period and calculate that the Pearson rho is equal to -.3478 (p-value = .0000).[36] In other words, persistent increases in external debt (a negative current account balance) are associated with increases in the income share of the top one per cent.

Given the low mobility of resources, rigidity of prices and absence of a fiscal insurance mechanism, at present the euro area is not an optimum currency area.[37] As a result, only three policy options are possible to reduce structural imbalances:

1. allow euro zone countries with resilient competitiveness gaps to introduce control of capital flows, reducing the mobility of capital within the common market;

2. a further increase of integration, including a defined common fiscal policy and a debt guarantee scheme;

3. the end of the common currency.

In the absence of any of the above rebalancing mechanisms, inequality driven by capital inflows and unemployment driven by competiveness imbalances are likely to increase even further, compromising the possibility to achieve sustainable and inclusive growth.

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36 F. Alvaredo, A.B. Atkinson, T. Piketty, E. Saez: The World Top Incomes Database, available at: http://topincomes.g-mond.parisschoolofeconomics.eu, accessed 3 February 2014. The available countries are Argentina, Australia, Canada, China, Colombia, France, Germany, India, Ireland, Italy, Japan, Malaysia, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the US.
37 R.A. Mundell: A Theory of Optimum Currency Areas, in: American Economic Review, Vol. 51, No. 4, 1961, pp. 657-665.

Conclusions and main messages

Europe 2020 is a credible strategy of industrial policy for the future of Europe and has the merits of presenting clear actions, clear targets and a detailed measurement strategy to monitor implementation.

Combatting inequality should be considered as an instrumental target for both sustainable and inclusive growth. At the moment, the distributive consequences of the strategy have not been fully taken into account and may hamper the realisation of the third pillar (inclusive growth).

Four main conclusions form take-home messages from the discussion of the existing empirical evidence from the literature.

First of all, focus on the educational system is necessary to accomplish equality in the labour market, which is a main driver of inequality in income. At the same time, it is not sufficient, since despite the recent massive reduction of educational inequality, wage inequality and the steep educational gradient of access to employment have increased.

Second, the strengthening of IPR protection may contribute to the consolidation of the current ranking of regions and countries, further increasing inequality across Europe. Smart specialisation does not solve the problem, because there is a hierarchy of sectors in terms of productivity growth due to the differences in maturity across technological trajectories. At the moment, it is difficult to obtain results in terms of cohesion indicators unless strong public sector involvement in basic science is envisaged, with fully open and appropriable results.

Third, solving the problem of access to financing by innovative companies should go hand in hand with careful implementation of regulatory checks to avoid the excesses that have occurred in the US in the past 20 years, where new corporate governance based on short-term targets has contributed to disproportionate income increases for the wealthiest and the worsening of inequality.

Finally, structural imbalances inside the euro area are a serious fault line that should be taken into account. Cumulative external deficits have driven massive inflows of capital, increasing asset prices that do not reflect fundamentals and contributing to the financial crisis. Although further scrutiny on causality is needed, this has been associated with an increase in income inequality.