

MAKING PROGRESSIVE POLITICS WORK

A HANDBOOK OF IDEAS

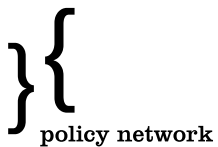


WIARDI
WETENSCHAPPELIJK BUREAU
BECKMAN
VOOR DE SOCIAAL-DEMOCRATIE
STICHTING



MAKING **PROGRESSIVE POLITICS** **WORK**

A HANDBOOK OF IDEAS



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ABOUT POLICY NETWORK

Policy Network is a leading thinktank and international political network based in London. We seek to promote strategic thinking on progressive solutions to the governing challenges of the 21st century and the future of social democracy, impacting upon policy debates in the UK, the rest of Europe and the wider world.

Under conditions of globalisation and European integration, the distinction between national and international problems has become increasingly blurred. Understanding the relationship between the domestic and the international informs our work across three principal areas:

- The future of progressive politics
- Europe's economic and social models
- The politics of multi-level governance and institutional reform

Amsterdam Progressive Governance Conference

This 'handbook of ideas' has been prepared for the Progressive Governance Conference taking place in Amsterdam, April 2014. The conference is jointly organised by Policy Network, Global Progress and Wiardi Beckman Stichting.

Global Progress

Global Progress, launched and led by the Center for American Progress, is an initiative that works to strengthen relations between progressive politicians, thinkers, strategists, and policy-makers across the globe.

Wiardi Beckman Stichting

The Wiardi Beckman Stichting (WBS) is the thinktank for the Dutch Labour Party, PvdA. The Hague-based thinktank acts as a creative intermediary between politics and academia in the Netherlands and beyond.

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introduction

HOW SOCIAL DEMOCRACY CAN TRIUMPH IN THE 5 – 75 – 20 SOCIETY

Policy Network

In the six years since the 2008 global financial crisis, progressive politics has been struggling to find a new identity. In an over-reaction against the third way experience, it “threw out the baby with the bathwater”: instead of analysing carefully what Tony Blair, Bill Clinton, Wim Kok, Gerhard Schröder and others got wrong, it yearned for a lost era of egalitarian basics without clearly working out what that meant and what its electoral implications would be. It saw the massive failure of markets as an opportunity to bring back the state when in fact rising public debt led to a crisis of the state, which in the public mind loomed larger than the crisis of the market. It struggled to formulate a publicly compelling alternative to austerity. In most countries, it has had to contend with the rise of anti-establishment populism, sometimes of the left, but mostly of the radical right.

Yet despite all these difficulties, the unpopularity of incumbent centre-right governments and coalitions, and the political fragmentation of their support, has enabled the centre-left’s return to power where a new generation of social democratic leaders are being forced to define for themselves a principled, but tough minded and realistic approach to government in harsh and difficult times. However, to make a success of this political turn of fortune, an effective capacity to

govern and a winning electoral strategy depends on an accurate understanding of social trends and attitudes in what we term the '5 – 75 – 20 society'. This essay offers some key reflections on this theme.

A lot of attention has focused on what has been argued is a fundamental dividing line in the potential electoral constituency of progressive politics between 'cosmopolitans' and 'communitarians'. In simplistic terms, 'cosmopolitans' are the winners from globalisation: consisting of the better educated (often female) and mobile workers, as well as ethnic and migrant groups building new lives in prosperous European communities; 'communitarians' on the other hand, tend to be white, predominantly male, working class voters, keen to defend the welfare state and a traditional way of life and see globalisation, economic change and membership of the European Union as a threat, not an opportunity.

This polarisation has occurred in many European countries as well as in the US for more than a decade and has already had significant political consequences. In Austria, France and the Netherlands, for instance, right-wing populists have been particularly successful at syphoning shares of the former left-wing working class electorate that feels 'abandoned' to the profit of white collar elites and migrant communities. These voters see themselves as the 'losers' from the 'hour glass' economy; they suffer from the decline in secure and well paid jobs for manual workers and think that life for them and their families has declined from a presumed 'golden age'. In many respects, the rise of UKIP support among this category only signals the 'normalisation' of Britain's situation vis-à-vis its continental neighbours.

Parties of the centre-left have sought to respond to the concerns of this group: ahead of the 2012 French presidential election, 'Gauche populaire', a group of public intellectuals close to the Socialist Party (PS), argued that the PS should tackle more resolutely the sources of economic and cultural anxiety that afflict its traditional working class supporters. In Britain, 'Blue Labour' sees working class alienation from social democracy as the result of the third way's emphasis on the necessity of continual economic change, a language of aspiration not assurance and security, and a perceived welcoming of mass migration. Similar debates can be heard between factions in many of Europe's centre-left parties.

This essay argues that it would be a mistake for social democrats to become over-obsessed with this communitarian/cosmopolitan dividing line. Voters who think migration is the most important issue facing the country are unlikely to be persuaded to back the centre-left in future by the party apologising for alleged past mistakes or promising a crackdown on migrant 'benefit tourism'. This is not to deny that there may be issues that have to be addressed, simply that social democrats are unlikely to gain electoral traction on them.

Instead, social democratic parties should pay more attention to the concerns of what we term the 'new insecure', which in our view embraces both groups: the 75% of our society that are neither in the 5% elite that, in income terms, is racing ahead, nor in the 20% who are poor and often marginalised. Put differently, a stable governing majority cannot be fashioned on the basis of appealing simply to the bottom 20%, even with the voters of an altruistic middle class added in. Nor can a credible electoral programme be fashioned for a strategy of redistribution from the elite: from conventional sources of income tax, there simply isn't enough money to spread around. Social democracy's new majority has to be built on something more radical than compensatory redistribution.

The 'new insecure'

Weaker life-chances, lack of opportunity and increasing insecurity are no longer afflicting only the most excluded groups. For some time now growing sections of our societies are suffering from uncertainty, and in some cases declining real wages and incomes.¹ The 'new insecure' have to cope with global economic forces and the spread of technology. They struggle to adapt to the social realities of falling living standards, feel the growing pressures of 'earning' and 'caring' in family life, and fear that life for their children will not be as good as for them in the face of pressures on pensions, access to decent health services, the costs of going to university and house price inflation.

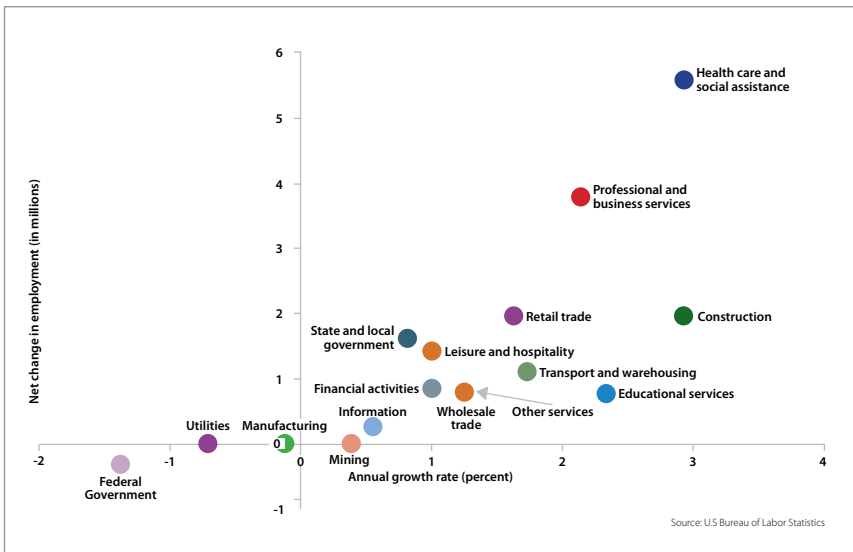
To be sure, every industrialised country will have variations in its class structure. Nonetheless, the dominant trend in the last two decades has been towards the creation of a '5-75-20' society in the developed western economies:

- Roughly 5 per cent who are enjoying 'runaway' rewards at the top, as asset prices and returns to wealth soar – a group largely composed of professionals working

in finance and property, the corporate elite and successful entrepreneurs, as well as those who inherit significant wealth.²

- 75 per cent in the middle who are either in work or have a retirement income, but are relatively insecure and often anxious about the future. Large parts of this group consists not only of ‘blue-collar’ industrial workers threatened by outsourcing to Asia, but also groups of middle-class professionals who fear their jobs will be next as the emerging ‘MINT’ economies move up the economic value-chain.³ Once secure professionals – such as academics, mechanical engineers and natural scientists – who are relatively worse off than their counterparts were a generation ago and who may be struggling to sustain their standard of living fall into this group as well.⁴
- And the 20 per cent at the ‘bottom’ of society who struggle in a vicious cycle of low-wage, irregular work, unemployment and limited access to welfare and are arguably ‘outsiders’ in the labour market and struck down by entrenched social immobility.⁵

Table 1: US employment patterns



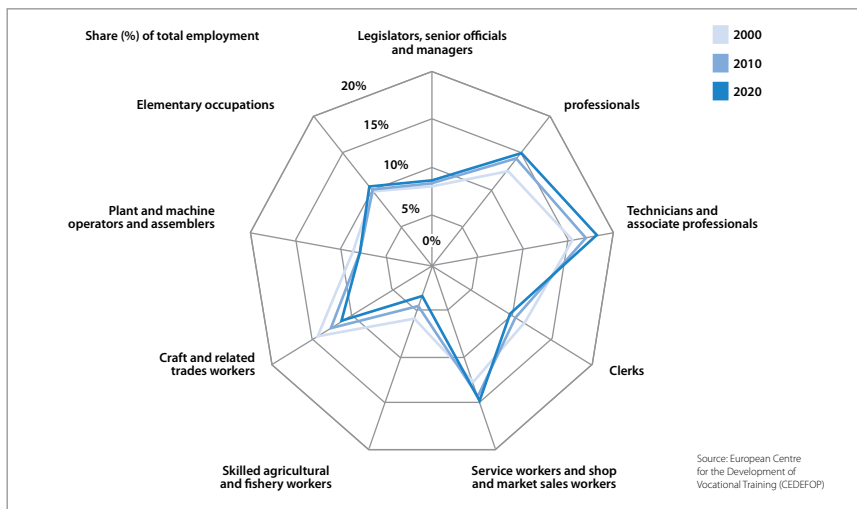
Projected change and annual growth rate, nonagricultural wage and salary employment, by major industry, 2010-2020

Key trends: Automation and economic forces, the ‘unfinished’ gender revolution, and the ageing society

The inequality, polarisation and growing insecurity which characterises the new class structure of the industrialised countries is being exacerbated by structural forces alongside economic and social change. Part of this is evidently to do with new economic forces: technology and automation; globalisation and trade liberalisation, and taxation policies in particular. The starting-point is that more than 75% of employment in the OECD countries is now in services⁶ and job growth is occurring in service-orientated sectors (both high and middle skill levels). In the US and Europe, employment patterns are changing dramatically (see tables 1 and 2).

The centrality of services to employment has meant that SMEs represent a vital economic backbone: there has been an increasing concentration of employment within SMEs. Europe’s 20 million SMEs employ almost 90 million people.⁷ Moreover, between 2002 and 2010, net employment in the EU grew significantly, by an average of 1.1 million jobs (or 0.9%) each year. 85% of this net increase occurred in SMEs, indicating that the share these firms have in employment growth is much bigger than the 67% share of these firms in total employment.⁸

Table 2: EU employment patterns



Past and likely future sectoral employment EU-27 2000-2020

However, it is the shift in the nature of the service-driven economy that is most significant. The analysis of the impact of 'automation' and the 'Big Data revolution,' where relatively highly skilled, human-capital rich jobs once performed by people are now performed by machines is increasingly in vogue.¹⁰ Technological change not only threatens the position of lower skilled workers, but those in 'white-collar' and professional occupations. The tendency is for labour productivity gains to increasingly benefit an ever smaller group at the top, leading to the further squeeze on nominal wages.¹¹ Moreover, an increasing share of GDP is flowing to capital at the expense of labour as technology replaces human workers. Nonetheless, technological change cannot be blamed solely for rising inequality and adverse economic outcomes.

The increasing volume of trade in the global economy as product, capital and labour markets are ever more liberalised puts further downward pressure on the wages and incomes of the middle. In many countries (although not the Nordic states), the structures of collective pay bargaining that have traditionally protected middle-income jobs and living standards are being eroded; neither is the public sector a 'safe haven', as the impact of austerity means that insecurity is spreading to the public sector professions. As the emerging market economies move up the productivity value-chain, so the competitive threat to workers in the industrialised states grows more acute, even though there may be some opportunities for 're-shaping' activities that need to be 'close to market'. Europe's chances of seeing significant re-industrialisation are limited by both its high energy costs and the central flaw in its approach to climate change – the attempt to restrain carbon 'production' in Europe, not carbon 'consumption'.

This point is emphasised by Anne Wren, who notes that there has been a major shift in the type of workers exposed to international economic forces.¹² Whereas in the 1970s and 1980s, 'blue-collar' workers in less skilled occupations were most vulnerable to global competition, today middle-class professionals find themselves under unprecedented threat. The ICT revolution has meant that high skilled employment in service sectors such as finance, law, media and business has become more internationally traded, increasing the extent of middle-income exposure to global competition and heightening job insecurity.

As a result, wage inequalities are accelerating as there is a secular decline in the relative economic position of middle-income households. For example, according to analysis by Gregor Irwin, median household incomes in Germany between 2000 and 2010 have consistently lagged behind GDP growth. In Japan, median incomes have fallen by an average of one per cent a year since 1995. In the UK, median income growth since the mid-2000s has fallen to zero.¹³ This change in the distribution of growth away from the middle is arguably a structural shift rather than a cyclical trend.

As the impact of these shifts has worsened in many industrialised states, taxation systems appear to be becoming less redistributive and progressive. It is sometimes forgotten that post-war taxation and welfare state regimes in Northern Europe were widely supported by middle-income groups, not only the poor, recognising that collective social provision and progressivity in the tax base protected their relative position in the distribution of earnings and rewards. Too often, these institutions and systems have been gradually eroded by the growing pressures towards restructuring, targeting and the residualisation of the welfare state: those on middle-incomes are losing their stake in social security. Yet the middle '75%' are the 'new insecure' who need collectivised social security to be assured of dignity and income adequacy, especially in retirement.¹⁴

Nevertheless, there are wider structural trends beyond economic forces: one set of social trends relates to what Gøsta Esping-Andersen has termed the 'unfinished' gender revolution in western societies.¹⁵ While the balance of caring and earning roles is being renegotiated between women and men, women continue to face major pay penalties and inequalities in labour market outcomes. On average, women in the EU earn around 16% less per hour than men. The gender pay gap exists even though women do better at school and university than men. Eurostat 2011 figures show that 82% of young women reach at least upper secondary level education in the EU, compared to 77% of men. Women also represent 60% of graduates in the EU. The problem is that Europe is squandering its explosion of female talent.¹⁶ Only 59% of working age-women (20-64 years old) are active in the European labour market, compared to a 70% employment rate for men.¹⁷

Moreover, families are under pressure as the increase in working hours coincides with rising care costs, both for childcare and elderly care. Apart from weakening family life, the risk is that women in particular are either forced out of employment, or compelled to accept jobs some way below their labour market potential, which undermines economic growth and productivity. The 'new' social risks include inter-generational imbalances and skills-related inequalities.

Finally, our ageing societies are putting further pressure on welfare systems while potentially weakening long-term growth, as larger numbers of older workers drop out of the labour market. The International Monetary Fund (IMF) recently warned that the impact of demography on public finances will be considerably greater than the financial crisis: in the EU, the cost of pensions is expected to rise from 10.2 to 12.6 per cent of GDP by 2060; healthcare will increase from 6.7 to 8.2 per cent.¹⁸ Maintaining an active workforce relative to the retired population is necessary in the long-term to pay for state services, which is likely to refocus debate about the necessity of migration in continental Europe. Europe's high rate of unemployment, particularly youth unemployment, has further weakened the long-term viability of welfare states, acting as a drag on growth.

Predistributive reform and multi-level governance

In light of these deep structural challenges, progressives need to advocate bold reforms built around a predistributive strategy designed to promote the growing numbers of the 'new insecure', while tilting the balance of structural advantage towards those from low and middle income households. Yale Professor Jacob Hacker has described predistribution as about 'making markets work for the middle class'.¹⁹ This deviates from earlier third way thinking since predistribution acknowledges that markets left to their own devices will not deliver socially efficient or just outcomes and that the third way failed to provide a positive account of the active state's role in regulating a complex and structurally unstable globalised economy. It also recognises that the traditional strategy of redistribution puts centre-left parties in an untenable position, since a growing chorus of complaint about 'free-riding' and 'undeserving' groups dependent on welfare provision erodes trust in the social contract.

The locus of predistribution is to rebuild support for collectivised security and public service provision by reducing structural dependency on the state, tackling

the underlying causes of wage and income inequality instead of relying on *post hoc* redistribution. The predistributive strategy begins with the need to develop countervailing powers to shape the outcomes of markets, rather than leaving markets free to operate without oversight or intervention:

- *Macroeconomic reform to correct sectoral and distributional imbalances.* Aggressive monetary policy intervention such as quantitative easing helped to prevent the 2008 crisis from turning a recession into a depression, but the long-term impact has been a major redistribution in favour of the top five per cent in the 'asset-earning classes'. Those who depend on wages and interest on savings in retirement have been particularly hard hit. At the same time, the strategy of nominal inflation targeting in central banking, including in the European Central Bank, has to be reconceived to fight deflation and prioritise full employment and growth, especially in Southern Europe.
- *Tax reforms are urgently needed to make taxation regimes more progressive.* Policy-makers must focus their attention on assets such as property, and unearned income such as inheritance, which are by definition more immobile and therefore harder to evade. Taxation systems are more likely to be progressive if a system of tax credits is adopted, rather than raising tax thresholds, which tends to benefit higher income earners. Tax credits can be used to support the incomes and childcare costs of relatively hard-pressed middle class families, rather than just the lowest earners in making work pay.
- *A revamped education and skills strategy to address the technology and automation challenge.* All governments since the 1990s have paid lip service to the importance of lifetime learning. Now, more than ever, it is a necessity as workers have to adapt to new technologies throughout their working lives. 'Jobs for life' are also in decline with average job tenure rates in the US down to 4.64 years, and between 8-12.5 years across European countries respectively.⁹ A personal learning account where individuals can invest in their own human capital as well as further and higher education – with incentives from the state through tax breaks and subsidised loans – would generate a new culture of active education and learning 'from the cradle to the grave'. Equally vital is to protect investment in early years' intervention and education, the best

approach to narrowing cognitive gaps between children from low and high income households.²⁰

- *Measures to democratise human capital and asset ownership.* The 'jobs for wages model' is increasingly under pressure as technological change and the global labour force weakens the bargaining position of middle-income as well as low skilled workers. If more groups are to share in the fruits of rising prosperity, the distribution of assets and the spread of ownership will need to be significantly expanded. Three areas are especially important. First, widening the base of employee share ownership and profit sharing. Second, expanding the pool of home owners, not by encouraging reckless lending to vulnerable households, but through a major extension of 'part rent, part buy' schemes through which an asset stake can be accumulated gradually over time, combined with major capital investment in housing infrastructure. Finally, fashioning an EU-wide 'baby bond' – an asset stake to which every child born in the EU would be entitled through a combination of government contribution and parental saving, addressing the distribution of assets as well as incomes.
- *Measures to make the labour market fairer by developing countervailing pressures to economic forces that accentuate polarisation and inequality.* Liberal market economies in particular have promoted the goal of employment creation, but at the expense of rising wage inequalities for which the state needs to make increasingly costly compensation. More effective protection includes statutory minimum wages and sectoral intervention in low wage sectors of the economy, as well as encouraging mechanisms of association through trade unions, employees' representative organisations, and social networks to organise workers in low skilled sectors, strengthening their capacity to negotiate collective pay bargaining arrangements and wage agreements. The Nordic states have shown how structured approaches to wage negotiation are consistent with open, globalised economies.
- *Expanding service sector jobs in caring sectors to widen employment opportunity.* This requires deindustrialised countries to rebuild their traded and export-led sectors through policies designed to promote innovation and new industrial policy, using the fruits of growth to provide high quality public services

while providing opportunities for the less productive majority of workers in the 'non-traded' services sector.²¹ This is where most jobs for the low to middle skilled in the industrialised economies will be created, further helping middle-income families by ensuring a supply of high quality caring services. Another challenge relates to expanding productivity in these sectors through new technologies and investing in the up-skilling of the workforce.

- *Structural reforms to improve the quality of public services.* A key pillar of middle-class security is the ability to access high quality collectively provided services, such as health and education, which the market cannot be relied upon to provide. Nonetheless, as real incomes rise over generations, citizens naturally come to have higher expectations of public services, and are willing to invest additional disposable income via taxes or alternatively, through private provision where their aspirations are not being satisfied. Moreover, technological change, demography and ageing are imposing new cost pressures on healthcare and education systems. In an era of constrained resources, it is vital that structural reforms can be implemented to make services more effective and cost efficient.
- *Championing gender equality remains the key to rebuilding support for inclusive and broad-based social security.* Most industrialised countries over the last three decades have witnessed the rapid entry of growing numbers of women into the labour force, but this remains an 'unfinished revolution'.²² Women appear to have a comparative advantage in high-skilled service sector occupations, while the evidence is that women in employment are significantly more likely to support welfare state policies such as universal childcare, adequate elderly social care, shared parental leave, public employment and collective service provision.²³ These policies must be combined with measures to reduce employment and pay discrimination in labour markets, eroding the 'motherhood pay penalty' too many working women still face.
- *Finally, investing in infrastructure and SME formation as a spur to growth.* Social democrats need a strategy for dynamic production and wealth creation, not only fairer distribution. Supporting entrepreneurial job growth in the SME or 'dynamic' services sector is the new politics of production. The best way to support the

living standards of middle-income earners is to ensure sustainable economic growth, which leads to rising nominal wages and an expanded tax base to be reinvested in caring services for families. Boosting growth in Europe requires structural reforms, not short-term fixes through public and private debt financing. This includes improving access to finance for SMEs and mid-caps, promoting high-tech manufacturing through investment in Research and Development, and strengthening the role of the higher education sector in technology and innovation diffusion. Reinforced public investment banks, including the European Investment Bank, have a crucial role to play in modernising and upgrading member states' long-term productive capabilities.

Many of these measures will need to be implemented through effective European institutions which ensure not only recovery and resilience after the financial crisis, but long-term growth, improvements in social well-being, and ecological sustainability. This will not happen by side-lining the EU in the untenable pursuit of a strategy of 'predistribution in one country': there has to be co-ordinated international action and cross-national benchmarking led by a strong European Union among a diversity of nation-states. The onus is on a new generation of centre-left leaders to translate these concepts into operational principles and policies and bend the arc of EU policymaking away from the 'engine of neo-liberalism' critique. The EU has to become the engine of progressive capitalism, with nation states acting in concert to pursue national interests.

No return to 'defensive' social democracy

A new landscape of distributional conflicts and deepening insecurity is opening up that presents a big space for social democracy. The wealthy few enjoy unprecedented rewards and the most excluded groups continue to suffer adverse life-chances, but it is the broad-base of society – the 75 per cent – which more than ever feels the spread of insecurity given the squeeze on incomes that has taken place in the last decade.

The political imperative is that social democrats have to devise new welfare state policies that appeal to the 75 per cent (and at the same time benefit the bottom 20 per cent) rather than making top-bottom inequality the basis of their appeal, or surreptitiously targeting resources to the bottom.

First and foremost, this means that the centre-left must not return to what the late Tony Judt termed 'defensive' social democracy. The traditional welfare states of the post-war era cannot be recreated in a world of greater complexity and social change; today's younger generation is both an individualistic and 'networked generation' who identify their interests with flat, non-hierarchical structures, rather than the vertical institutions of the 1945 settlement.

Likewise, social democracy will neither find salvation in crude distributional politics, nor a flirtation with political populism. The politics of handing out 'sweeteners' to deserving electoral groups is a fraught political strategy in an age of acute fiscal constraint. Bending to populist attacks on globalisation and the European Union also ignores the reality that today's world is more internationalised and interconnected than ever before.

The greatest challenge for social democrats, therefore, is the battle to sustain political coalitions in favour of collectivised social security and public provision in a world where structural change may be eroding the cross-class coalition in favour of welfare states. Highly skilled workers in sectors that are more exposed to global competition may be increasingly unsympathetic to spending on redistribution and the welfare state, and are less likely to support centre-left parties. There are fewer middle-income professionals in 'sheltered' public sector occupations prepared to unconditionally support welfare state spending than was the case in the 'golden age' of the post-war welfare state.²⁴

Writing a fairness contract for the 'new insecure' depends on the centre-left's ability to politicise and lead a strategy premised on predistributive reform and multi-level governance. It has to stand up for the 75 per cent if it is to help those most in need in our societies, to maintain consent for universal social security, to generate the growth needed for investment in public goods, and to ensure a dynamic economy and society. As the great Swedish social democratic leader Olof Palme once declared: 'secure people dare'.

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section one

FUTURE WEALTH CREATION - GOVERNANCE & POLITICS

THE SMART STATE

Philippe Aghion

The post-WWII European welfare state had three main pillars: the first pillar was a top down industrial policy based on national champions and state owned firms. The second pillar was a Keynesian macroeconomic policy to smooth the business cycle. Essentially, whenever there was a recession government would spend in order to boost consumption, the so-called 'Keynesian multiplier', and taxation would then be utilised to help reduce the public deficit caused by the stimulus spending. The third pillar was the welfare system itself which issued various forms of allocations to top up low salaries or to enable people to have access to various services which they would not have otherwise.

This welfare state was very well adapted to the type of catch-up economy that existed in the post-war years, where growth was based on copying and adapting the more advanced technologies and techniques of wealthier economies, and the US in particular. However, the rules of the game have now changed. European states don't exist in a relatively closed, protectionist, and less globalised era.

1. Innovators, not imitators

European states have caught up with the leading economies and have now,

instead, to rely on innovation, under pressure from the new emerging economies that are doing the catching-up. European economies can thus no longer just be imitators, they have to be innovators.

Globalisation has pushed states to require more and more innovation led growth. However, innovation led growth has also undermined the very foundations on which the welfare state is built. In the innovation economy, Schumpeterian creative destruction means the old model of industrial policy based on national champions and state owned firms is obsolete because greater competition means that new firms are constantly destroying and replacing old firms. This competition is crucial for the innovation process. Indeed, it is a catalyst for frontier innovation. The consequence is that states can no longer rely on old-fashioned, top-down Colbertiste industrial policy.

2. Reclaiming the supply-side agenda

Further, the nature of an open and global economy means that states can no longer just decide to increase demand because that increased demand may well end up being for foreign products, particularly those which are either better quality or less expensive than your state's own products. States must therefore ensure they are competitive.

This means that states can no longer just have a demand side-approach. We need also to have a supply-side approach. We cannot only have automatic stabilisers for consumers, but we must also have them for firms, to make sure that firms, particularly those that are credit constrained, can maintain their R&D investment over the business cycle. Instead of a Keynesian macroeconomic policy we must therefore develop a counter-cyclical macroeconomic policy to help firms maintain their R&D, employee up-skilling and other kinds of growth enhancing investments.

3. Creative destruction and flexicurity

There must also be a new role for the state. Creative destruction means there is a perpetual cycle of creation of jobs and the destruction of others. The new state must be there to help by providing the unemployed with good income insurance and good training so that workers can bounce from one job to another.

This role has in the past been fulfilled by trades unions and employers but the new economy will require a more advanced model of 'flexicurity'. Denmark is a good example of this where you have flexibility in hiring and firing on the firm side, but there is also income insurance and facilities for workers to retrain and find a new job. The state thus supports and fosters the flexicurity/innovation-led system.

The new-Left has to do three things: it needs to promote growth; it needs to make sure that growth is inclusive, and socially just, and it needs to reduce budget deficits. But how can centre-left governments do these three things together?

4. Governments can't invest in all things everywhere

First, it is high time to depart from the old Keynesian view that governments can invest in all things everywhere. The state has to be targeted. This targeting can be done in two forms: horizontal targeting and investment in things that benefit all sectors. Education is a good example. Progressives need to ensure high quality education that is good for growth. PISA performance is an example of this, but we must also remember the Shanghai Rankings.

Then there is vertical targeting: support that is focused on priority sectors, for example renewable energies, biotech, and health. However, if states do sectoral policy they cannot do it the old way. It has to be a pro-competition sectoral policy, not one of sheltered protectionism. States can promote competition, for example, by making firms compete for state subsidies.

Crucially, to do this, states must also ensure that their investments are well governed.

5. Avoiding the evils of the old Left

If progressives want to achieve inclusive growth while still respecting budgetary discipline, then two evils of the old Left must be avoided: one is what I call 'bazaar Keynesianism' – the idea that demand drives growth, that the only thing that matters is for governments to spend and that therefore the supply-side doesn't matter. This is an idea that the Left has to get rid of. That is not to say that automatic stabilisers are not important, but we cannot just dismiss the supply-side either.

The second evil is what I call the ‘tax and spend’ philosophy – the idea that governments can tax as much as they want, without any negative effect on innovation and growth, especially if part of the tax revenues are used as public subsidies. For example, in France, President Hollande introduced a 75% tax in the belief that taxation either would be neutral or would have its effects offset by the establishment of a ‘Banque Publique d’Investissement’. This is very wrong.

The best example of why this is so is Sweden. Until the early 1990s, Sweden had a labour income tax of up to 90% and capital taxation with an upper rate of 80%. The result was major capital flight and a serious decline in incentives. In 1991, following the Swedish banking crisis, the government introduced a series of reforms, reducing the maximum marginal tax rate on labour to 57% and making the tax on capital income a flat rate of 30%. The changes had a huge effect in fostering growth and innovation. The rate of patenting increased by 250% and growth increased accordingly while spending was actually reduced. Yet these changes were achieved while maintaining progressivity – Sweden is still the second most equal society in the world (behind Denmark).

6. Tax systems must not discourage innovation

The Swedish case also demonstrates that in reducing budget deficits, states cannot rely solely on increasing taxation, but rather on a mixture of tax reform and public spending reform. The latter course of action should be more growth-enhancing than the former, as has been demonstrated in recent empirical work by Alberto Alesina, Silvia Ardagna and Francesco Giavazzi. In particular, taxing too much has a discouraging effect on consumption and on firms’ investment, and also one ends up reducing tax revenues – the latter we refer to as the ‘Laffer curve effect’.

7. The smart state

The policy that works best is thus a mixture of targeted reductions in spending, combined with some tax increases and the rationalisation of the tax system. This is what we can call the smart state – not the old welfare state of the Left, nor the minimalist state of the Right.

In this era of globalisation, economic trends show that state intervention is warranted. But state intervention cannot be like it used to be. It has to be a smart

state where governments select their sectors, they select their areas of intervention and you make sure that good governance goes with state investments to make the investments as cost effective as can be. That is the role of the state in the growth process.

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TECHNO OPTIMISM

Will Hutton

To date the centre-right has got the better of the political and economic argument after the crash. The attack outlines are familiar. The proper response to the crisis is to shrink the state, limit welfare and incentivise ‘wealth generation’. However, their position in reality is more nuanced, acknowledging a creative role for government that the ideology does not choose to put centre stage. In Britain, for example, both Cameron and Osborne are enthusiasts for industrial policy, as are most European centre-right leaders.

The state and private sector are co-creators of wealth given the need to underwrite, mitigate and collectivise the frontier risks of transformative innovation. In our times, this reality – in practice and in theory – presents the centre-left with its intellectual and political opportunity.

1. Techno optimism and the sharing revolution

Digitalisation is but the latest so-called General Purpose Technology to transform the economic base; a range of nano, bio and cogno technologies are following in its wake. The next big thing is likely to be the hooking up of real time data collection globally. Knowledge, especially intangible knowledge in computer software, brands, human capital and intellectual property, is now much more important in all economies than tangible investment in factories and machines. This is creating unprecedented risk to business models and traditional market boundaries.

Confronted by this degree of risk, corporate strategies are highly risk averse. Individual companies hoard cash and limit investment and innovation spending for fear of making a calamitous mistake. This also tends to support the share price and remuneration of directors' teams. Instead, like Google, they try and buy young companies who have successfully taken risks and developed new business models.

However a minority are experimenting with 'open innovation' as the best way to minimise risk in the brave new world of intangible investment and multiplying disruptive technologies. Essentially companies pre-agree to work with each other on research and business model development and co-develop new products and services rather than go it alone. This requires enormous trust, a strong sense of business purpose, committed owners who believe in innovation and a willingness to share.

This sharing revolution along with the emphasis on trust, commitment, long term ownership and openness is highly congruent with left of centre values and beliefs. It also entails reward packages for directors that are commensurately lower, where maintaining a high share price in the short term is downgraded as a business objective. A whole new soft and hard infrastructure informed by centre-left values is needed. Yet very few European left politicians have chosen to make this territory their own.

2. But what if the techno pessimists are right?

This approach may seem premised on a big bet that the techno optimists are right. Pessimists argue that robotisation is about to eliminate many jobs; for example 47 per cent of all current US jobs are at high risk from automation according to Carl Frey and Michael Osborne. Others, notably MIT Professors Erik Brynjolfsson and Andrew McAfee are more optimistic. They predict that ICT and robotisation are going to reinvent our economic base creating new industries and boundless new economic possibilities. They are advocates of the revolution of the 'micro makers', using the internet of things and 3D printers to enfranchise a new generation of entrepreneurs. Don't get trapped into fearfulness about technology consigning societies to a workless future: human ingenuity and tastes are boundless.

Nobody knows who is right (I lean to the optimists) – but even pessimists predicting the end of work and a harsh new world of a few high paid ‘hi touch’ and ‘hi tech jobs’ amid a myriad of transient insecure work offer possibilities for the left. If this is the future, then our societies will need new and smarter systems of redistribution and welfare support just to hold them together. The ball is in the left’s court.

3. What to do economically

The left must put the social obligations of ownership and shared property rights back at its heart – but in a 21st century guise. The contemporary company is seen as the creature of its owners who have complete control of the assets that they own. Executives are paid extravagantly to the extent they advance the interest of the owners. Research is advanced to the extent inventors unassailably own intellectual property rights. Inheritance tax is to be lowered so that entrepreneurs can pass on their property untouched by social claims to their progeny.

But the successful 21st century economy, exploiting the multiplicity of innovative possibilities, will require high trust, open companies who have strong values and a strong sense of business mission. Economies will want a plurality of firm types – PLCs, employee owned, mutuals, co-operatives – and wave after wave of new start-ups embodying new ideas.

This vibrant, diverse matrix of entrepreneurial companies open to each other and the wider society will not develop spontaneously from the market. The body of company law, the structure of finance, the conduits for risk capital and the necessary intermediate institutions that will help catalyse innovation and broker open innovation networks will vary from country to country depending on varying starting points. But the task everywhere for the left should be the same – to navigate its capitalism into this space by proactive intervention and design by government. This will require a thought through role for the state as risk taker, innovator-in-chief, institution builder and strategist.

In particular there needs to be a paradigm shift in the intellectual property regime to foster sharing, licensing, open science and open innovation. Western

societies cannot allow innovative ideas and breakthrough scientific advances to be imprisoned behind the wall of watertight copyrights and patents and whose exploitation will depend on the particular capabilities, financial muscle and technical competence of the copyright and patent holder. This is an acute problem in the US. The European social democratic left should strike out in a different direction.

4. What to do socially

The over-riding economic and social issue of the twenty-first century is going to be income and wealth inequality – intensified by the trends outlined above. The returns from work are going to become much more dispersed around the average, with large numbers in all our societies living at the margins. Yet if we want our societies to embrace change and experiment with the innovative and the new, we need everyone to feel confident and future facing – and life at the margins to offer possibilities of joining the mainstream. Similarly we want churn and change even while the trend is for the stock of wealth to become concentrated in ever fewer hands – the argument of Thomas Piketty.

Western societies, unless they are watchful, will witness the return of family dynasties whose grip on the top positions – along with the accompanying ideology that somehow they deserved privilege – will become unchallengeable.

We need a new mutuality to span our societies, lower inequality and accommodate innovation and change. It will be a mutuality that supports income support and the transition from old jobs to new (variations of flexisecurity). It will extend to housing, health and education. In all these areas we have to offer a mutual bargain to underwrite risk and the uncertainties of 21st century life. We need constantly to break down incumbent centres of power – hence the case for vigilance on monopoly and abuse of market power, but also for inheritance, property and capital gains taxes to limit concentrations of wealth.

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THE FUTURE OF INEQUALITY

Thomas Piketty

The distribution of income and wealth is one of today's most controversial issues. The good news is that there are several possible futures. History tells us that there are powerful economic forces pushing in every direction. Which one will prevail depends on the institutions and policies that we will collectively adopt.

1. Combining efficiency and equality of opportunity in education

Historically, the main equalising force has been the diffusion of knowledge and skills. However, this virtuous process cannot work properly without inclusive educational institutions and continuous investment in skills. Consider the case of the US. Here is a country that was largely built as a counter-model to the wealth-based 'patrimonial' societies of Old Europe. In effect, the concentration of wealth was much less extreme in the US than in Europe until World War I. The US is also the country which first developed mass education. Over the course of the twentieth century, however, US inequality surpassed European levels, first because European wealth inequalities were wiped out by the 1914-1945 violent shocks, and next because European countries decided then to set up institutions which are structurally more egalitarian and inclusive than those of the US.

In particular, today's US education system is plagued with extreme stratification that does not seem compatible with the idea of equal opportunity. The average income of the parents of Harvard students is currently about \$450,000, which corresponds to the average income of the top 2 percent of the US income hierarchy. The total absence of transparency regarding selection procedures should also be noted. To be sure, unequal access to higher education is still very high in Europe as well. In the US, France, and elsewhere, talking about the virtues of the national meritocratic model is seldom based on close examination of facts. Building higher education systems that truly combine efficiency and equal opportunity is a major challenge facing all continents in the twenty-first century. Nobody has found the ideal system yet.

2. Reconsider taxation on high incomes from labour

Equal access to education is necessary, but not sufficient. It certainly does not guarantee that a fair and harmonious distribution of income and wealth will prevail.

The spectacular increase of US income inequality since the 1980s largely reflects an unprecedented explosion of very elevated incomes from labour; a veritable separation of the top managers of large firms from the rest of the population. One possible explanation would be that the skills and productivities of those managers rose suddenly in relation to those of other workers. Another more plausible explanation, and more consistent with the evidence, is that top managers by and large have the power to set their own remuneration, in many cases without any clear relation to their individual productivity.

This phenomenon is seen mainly in the United States and to a lesser extent in Britain, two countries which have turned their back on the very high top income tax rates that applied there from the 1930s to the early 1980s. The invention of confiscatory tax rates on incomes deemed to be indecent was in fact an impressive US innovation of the interwar years.

3. Tackling the excessive rate of return to capital

Beyond education and income factors, history tells us that, in the long-run, the most powerful force pushing in the direction of rising inequality is the tendency of the rate of return to capital (r) to exceed the rate of output growth (g). When r exceeds g , as it did in the nineteenth century and seems quite likely to do again in the twenty-first, initial wealth inequalities tend to amplify and to converge towards extreme levels.

It is useful to recall that output can grow for two reasons: because of population growth, and because of per capita output growth (i.e. productivity growth). On the one hand, it seems unlikely that the demographic boom witnessed over that period will occur again as the entire world population is expected to stabilise. On the other hand, even if productivity growth continues forever as appropriate technological innovations can allow for permanent, immaterial, low-pollution growth, it will probably be no larger than 1-1.5% per year; a level corresponding to countries lying at the technological frontier over long periods.

Under such conditions, it is almost unavoidable that global growth rates in the twenty-first century will be significantly below returns to capital. It is critical to realise that there is no natural force pushing the return to capital toward the growth rate. Growth has been close to zero during most of human history, while the return to capital has

always been significantly positive (typically 4-5% per year for land rent in traditional agrarian societies). According to Marx, the capital/output ratio should eventually become infinite, so that the rate of return will go to zero. But the falling-rate-of-profit hypothesis did not happen historically, and there is no logical reason why it should have. As long as wealth holders consume some of the return to their wealth – which they do – there is no reason why capitalists should ‘dig their own graves’. According to Forbes global billionaire rankings, top wealth holders have been rising more than three times faster than the size of the world economy between 1987 and 2013.

4. The case for a global progressive wealth tax

The inequality between r and g naturally leads to a very large concentration of wealth. This stirs discontent and radically undermines our democratic values and institutions. The ideal solution to this would be a global progressive tax on individual net worth. Those who are trying to enter the game and start accumulating new wealth would pay little, and those who already have billions would pay a lot. This would foster mobility and keep inequality under control. Most importantly, a global wealth tax would put global wealth dynamics under public scrutiny. The lack of financial transparency and reliable wealth statistics is probably one of today’s main democratic challenges.

Of course there are alternatives, such as the authoritarian capital controls and oligarchs imprisonments seen in China or Russia. For countries that want to preserve international economic openness and the rule of law, a global wealth tax is a superior option. Another solution is inflation. It has played a large role historically in order to reduce the kind of large public debt that we again have today. The problem is that inflation destroys the saving accounts of the lower and middle classes: it is like a tax on low wealth. A tax on high wealth seems preferable.

5. The US and the EU should lead on international cooperation

In order to move in the direction of a global wealth tax, we need a lot more international cooperation than we presently have. This is difficult but feasible. The United States and the European Union each represent one quarter of world GDP. Assuming they manage one day to speak with one voice, which would require a serious shake-up of Europe’s deeply dysfunctional federal institutions, they have the capacity to create a global registry of financial assets and to impose adequate

sanctions on tax havens and other non-cooperative countries. Short of that, we face a serious risk that a growing fraction of public opinion will turn against globalisation and vote for nationalist and protectionist responses.

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THE FREE-MARKET FANTASY

Jacob Hacker

When I first started speaking about 'Predistribution' a few years back, I expected to be attacked, and I was. My call for improving markets rather than just cleaning up after them was immediately criticised for a variety of often contradictory reasons. It was too wonky, too vacuous, too aggressive, too timid, too familiar, too much of a break with the past.

Frankly, however, I never expected it would be dismissed as '1970s-style socialism,' as UK Prime Minister David Cameron suggested in his keynote address to the Conservative Party last year. This stale dismissal is an indication of how little many of today's leaders have learned from economic theory or history, especially the history of the past few years. After the worst financial crisis since the Great Depression, can we really believe that markets are infallible? Can we really believe that leaders should wash their hands of responsibility for clear failures of the market that make all of us – and especially those of us with the least political influence – worse off? It is a fantasy to believe that successful capitalism only requires that government fix things up after the fact. If the left is to reclaim the economic high ground, it will have to bury the free-market fantasy once and for all.

1. Markets are not God-given or natural

Markets can be enormously effective, but they aren't always and they are never self-governing. They rest on rules of the game that inevitably advantage some players and not others. The increasingly lax rules governing the financial sector, to

take the most salient recent example, advantaged market players willing to take on more leverage and risk without regard to the grave systemic threats their actions posed. In the language of economics, these threats were an 'externality' – privatised gains, socialised losses, predictable crises. The core point of predistribution is that progressives need to think more seriously about how the rules of the market, and the measures taken to augment and support it, encourage the kinds of social outcomes that citizens value. The distortion of these rules in key areas from finance to corporate governance to energy to industrial relations hinders not just growth, but also the translation of growth into broad-based economic and social gains.

2. Powerful interests have to be countered

These distorted rules are not a coincidence. They reflect a related implication of predistribution: capitalism as well as democracy depend on broadly distributed influence and opportunities. More and more research suggests that the powerful economic interests in finance and the corporate world that have shot ahead over the last generation have in turn used their economic power to reshape markets to their advantage, or at least to fend off measures that would limit the externalities – from carbon emissions to toxic financial assets – they impose on the rest of us. It was Adam Smith, after all, who warned that unchecked merchants and manufacturers would act as an 'overgrown standing army' that would 'upon many occasions intimidate the legislature,' repressing wages and rigging policies in their favour. As the political scientist Deborah Boucoyannis has convincingly shown, Smith believed that to increase national wealth 'profits should be low and labour wages high, ... land should be distributed widely and evenly, inheritance laws should partition fortunes, taxation can be high if it is equitable, and the science of the legislator is necessary to thwart rentiers and manipulators.' We should heed Smith's call.

3. Progressives need a new agenda for market reform

As Smith's words suggest, progressives need to reclaim the mantle of economic efficiency and growth, but contest the wrong-headed claim that wise democratic management and supplementation of the market are at odds with these goals. The broad thrust of economic change during the twentieth century – rising incomes, longer lives, increased education, greater equality of income and wealth – reflected an effective marriage of the state and the market. This marriage has come undone over the last generation, and no progressive political leader can afford to let the

divorce continue. There has to be a clear understanding of how ill-governed markets can undermine progressive goals, as well acknowledgement of the limits of simply taxing and spending more to offset ever more imbalanced economic outcomes. The French economist Thomas Piketty may be correct that a global wealth tax will ultimately be necessary to ensure that wealth inequalities do not grow so large they make a mockery of democracy. In the here and now, however, progressives need to articulate an agenda for market reform that takes seriously the political and economic constraints on the state in our current era.

4. Predistribution as a governing idea

Four themes should define a new redistributive agenda: a true commitment to equality of opportunity, embodied in universal access to affordable pre-K education and college; the encouragement of faster, more broadly shared, and more stable growth through public investment and stronger discipline of finance; a concerted campaign to expand and improve public services so that all citizens have access to a basic set of goods essential to human flourishing, regardless of income or wealth; and the fostering of countervailing power and participation through the empowerment of communities, civic organisations, and economic watchdogs, including, of course, trade unions but also collective investors (such as pension funds) and public-interest organisations (such as anti-poverty advocates).

5. Renewing organisational power bases

I have laid out how to achieve these goals in more detail elsewhere, and Policy Network has produced a series of stimulating briefs that take up the challenge. But we should not forget the larger vision: Even in this age of global competition, enormous variation exists across rich nations in the equality of wages, the basic protections that workers enjoy, the pay of senior executives, and other features of the economy that are vital to citizens' well-being. These differences reflect not just different policies, but also the varying power enjoyed by different players in the market. And, of course, government policies reflect such power differences as well. Where organisations representing the broad concerns of citizens have more weight, markets as well governments deliver benefits that are more broadly shared.

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THE DEFLATION TRAP

Andrew Gamble

The 2008 financial crash plunged the western economies into the most serious economic crisis since the 1930s. Co-ordinated intervention averted a meltdown. The seriousness of the crisis can be measured by the time it has taken for economies to recover (this is the slowest recovery from a recession since 1945) and by the fact that interest rates are still being held close to zero, five years after the crash. The success in managing both the financial crisis and then the eurozone crisis is taken as proof that the political and economic order is resilient, and that the worst is over. A new mood of optimism is evident as fresh signs of recovery emerge.

But the crisis is not over. There can be no simple return to business as usual and the deep underlying problems of the economic model which led to the crash have not been resolved. Crisis will return if more lasting reforms are not put in place. In the last major period of crisis and restructuring in the 1970s the world faced an inflation trap. The reforms and structural changes which were adopted throughout the OECD economies eventually led to a new period of expansion and prosperity, spurred on by the incorporation of the economies of the new rising powers into the international economy. A new era of prosperity of the international economy can be achieved, but only if some key structural obstacles are again removed. What the western economies face this time is not an inflation trap but a deflation trap, the kind of experience Japan endured in the 1990s. If this is not to become a general experience key issues have to be tackled. The three major ones are:

1. Reforming global governance

The global shift in power which has been taking place for some time is still in its early stages. Managing this transition requires major efforts now to create the structures which can promote co-operation and bring the rising powers into the governance of the international economy. The new importance accorded to the G20 after the crash was an important start, and led to important reforms such as the creation of the Financial Stability Board (FSB) and the Basel III Rules. But since then the momentum has slowed. There have been smaller changes in the IMF, with more votes being given to the rising powers, but the US still retains its 15% share and right to veto.

Elsewhere the WTO remains deadlocked, and moves like the TPP and TTIP indicate a growth of bilateral rather than multilateral initiatives. We risk creating a multipolar world which is no longer a multilateral one. There has been much talk of reforming the UN Security Council to reflect the new realities but nothing has so far been achieved. Agreeing rules for a new international order which is no longer either US-centric or Western-centric is a key requirement to create the conditions for a new era of expansion and prosperity.

2. Finding a new economic model

Fears of a secular stagnation in the western economies have increased. The rising economies will continue to grow because of technological catch-up. But economies at the technological frontier are finding it very difficult to continue to grow as in the past. Economic historians point to the absence of a fundamental technology which raises productivity and incomes across all areas of the economy. Information technology may yet prove to be that fundamental technology, but it has not so far delivered. Steady progress in living standards has underpinned the stability of western democracies in the last seven decades. This is no longer guaranteed. Few western economies now benefit from a demographic dividend, and there is increasing resistance to immigration.

Even if growth could be restored on the old basis there is the looming problem of climate change, underlined once again by the most recent IPCC report. If action is not taken it will be a major constraint on growth in the future because of the diversion of resources required to mitigate its effects. The priority should be switching to forms of green growth, able to contribute to mitigation of the environmental problems which human societies have created, both through adaptation and through massive investment to find technological breakthroughs which will deliver clean and cheap energy to the whole planet. Policy is still based on the assumption that economic growth of the kind experienced through most of the last century will continue indefinitely. This has to change.

3. Affording the state

In line with past financial crises and economic recessions, the 2008 banking crisis was swiftly transformed into a fiscal crisis and then a sovereign debt crisis. The costs were loaded on to the public balance sheet, and the focus of policy became how

to reduce the size of the state to restore the balance between public and private spending which existed before the crisis. If austerity, however, is not quickly followed by recovery and renewed growth, the legitimacy of the economic and political order will come under increasing strain, and the support for anti-system populist parties will grow. To avoid this, political parties have to find ways to avoid the deflation trap, as well as addressing questions of distribution and social justice, in particular finding new and innovative ways to narrow inequality and strengthen social cohesion.

Disengagement and disaffection of citizens has to be countered, otherwise the capacities of government to take a lead in tackling many problems will be impaired. Governments are going to need greater, not fewer, resources in the future to do all the things expected of them, but gaining the right to extract those resources from citizens is becoming increasingly difficult. Finding the means to create new forms of solidarity and to re-legitimate public action are essential if governments are to be able to negotiate reforms to international governance and build a new growth model.

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BEYOND FREE MARKETS AND COMPENSATORY REDISTRIBUTION

Monika Sie

Growing income inequality within countries and new insights about the negative implications of high inequality are raising fundamental questions about our economic order and policies. There is now a momentum for the progressive left to move beyond the policy theory of 'free, global markets plus compensatory redistribution'.

1. Growing income inequality

Although income inequality differs markedly among countries, the common pattern of rising inequality in most countries of the world since the 1980s has been striking. In OECD countries, inequality first started to increase in the late 1970s

and early 1980s, most notably in the US and UK, after the elections of Reagan and Thatcher. This pattern became more widespread from the late 1980s. Over the last ten years even traditionally low-inequality countries such as Germany, Denmark, and Sweden have become part of this trend. Moreover, Asian countries (China and India), the transition economies of Eastern Europe and the former Soviet Union, and several Sub-Saharan African countries (especially Nigeria and Ghana) have shown surges in internal inequality.

2. Winner-take-all

Looking at the shares accruing to each decile (10 percent) of the population, rather than at average inequality, José Gabriel Palma revealed another common pattern among middle- and high-income countries since the 1980s. His research shows that the difference between high-inequality and low-inequality countries lies primarily in what happens to the top 10 percent and to the bottom 40 percent. The share of total income for the 50 percent of the population in between these two extreme groups is relatively constant among all middle- and high-income countries. In high-inequality countries, the top 10 percent has been pulling away, whereas the bottom 40 percent has seen its share squeezed. In low-income countries the ratio between the top 10 percent and bottom 40 percent has remained much lower. With the richest in high-inequality countries becoming steadily richer, while the 50 percent in the middle are not much better off than thirty years ago, it must be concluded that trickle-down economics is not working.

3. Causes and consequences of inequality

Empirical research into the causes of inequality makes clear that there are some common factors underlying the widespread surges in inequality around the world. 'Traditional' and country-specific causes, such as differences in land ownership, education, and city/region background, do not appear to be responsible for the worsening situation. Crucial are 'new causes' linked to the deregulation and globalisation of financial markets, the flexibilisation of labour markets, and the nature of economic reform policies. The view that has been dominant for decades, that it is 'the inexorable ways of the market', is making way for the insight that man-made laws and regulations determine the degree of inequality. This is supported by the finding that inequality has decreased significantly in countries (e.g. in Latin America) that have pursued active egalitarian policies.

A generation of progressive politicians has shown little interest in income inequality. Rising inequality and new insights into its negative consequences for economic growth and financial sustainability, as well as a strong correlation with many undesirable social and political developments, make this position untenable.

4. Beyond 'global free markets' and compensatory redistribution

For decades the progressive left has had no analysis and critique of the dynamics of capitalism, no distinct vision on the relationship between globalisation and democracy, nor ideas on economic order and economic policy that differed substantially from the economic 'pensée unique'. It has strived for maximum growth through right-wing economic policies for 'free, global markets', and relied primarily on compensatory redistribution to pursue its social goals.

This strategy is becoming increasingly problematic for two fundamental reasons. Firstly, 'free, global markets' are not stable, efficient, or environmentally sustainable. In fact, there is no such thing as a 'free global market'. Markets are always shaped by politics. And we have to conclude that the current course of globalisation and economic growth resulting from the legal frameworks that have been adopted over the last thirty years (for the financial sector, the labour market, corporate governance, etc), is inefficient and susceptible to crisis, benefiting the few and neglecting environmental constraints.

Secondly, relying primarily on taxation and welfare benefits to achieve progressive goals will be increasingly problematic. The massive pressures toward inequality, insecurity, and exclusion, and the damage to social cohesion and democracy, lie far beyond the range of compensatory redistribution. Moreover, the idea of using the power of government to redistribute on a large scale will be more and more difficult in an era of fiscal constraints, increasing suspicion of government and more diverse societies, as well as decreasing support for equalising policies and large-scale welfare benefits, and European integration of markets without the accompanying solidarity to sustain a welfare state on a European scale.

5. Redirect globalisation and construct new forms of countervailing power

We should seize on the problems of growing inequality, rising unemployment, and environmental constraints as an opportunity to tame global financial capitalism.

A substantial body of recent academic literature and research can support a progressive left alternative that would simultaneously increase economic efficiency, fairness, and opportunity (e.g. the work of Dani Rodrik, Roberto Mangabeira Unger, Jacob Hacker and Paul Pierson, the Centre for American Progress on middle-out economics, several European authors on a social investment pact, and the Stiglitz real economic reform agenda). That agenda comprises measures to encourage macroeconomic stability, promote full employment, broaden economic and educational opportunity through a public social investment agenda, promote substantial public investment in research, stimulate innovations and investment that are more focused on reducing environmental costs than on reducing the labour-intensity of production and use the power of government to enforce higher standards in the labour market and to curb the excesses at the top.

At least three elements are key to the success of such a left alternative. Firstly, instead of viewing globalisation as a system that requires a homogeneous set of institutions, we should move towards a regime that allows democracies to develop their different ways of achieving social goals. Secondly, we have to exchange the right-wing myth of 'free, global markets' for a left alternative of public involvement in the market in order to achieve a society more in line with our fundamental values. And lastly, we need to invent new forms of countervailing power and democratisation of the market, to represent ordinary people as workers, consumers and citizens.

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WILL THE RETURN OF ECONOMIC GROWTH MEAN RISING WAGES FOR WORKERS?

Gavin Kelly

How effective will advanced economies be at translating economic growth into higher wages for those in the low to middle part of the distribution and is this link weakening over time, reinforcing a 'trickle-up' tendency in mature economies?

A great deal depends on these questions, yet they all too rarely are directly addressed. The answers not only shape public attitudes towards a pro-growth agenda but they also dictate how much weight redistributive policies need to bear in an era when public appetite for an extension of redistributive tax and benefit policies is being widely questioned.

In the UK context, the simple ratio of growth in GDP to growth in median wages weakened markedly in the early 2000s (pre-crash) compared with the 1990s and 1980s. The thread between GDP growth and median pay has long since broken in countries like the US and Canada and has frayed recently in some EU countries (Germany, France) but less so in others (Sweden, Denmark).

In simplified economic terms, the link between GDP and the wages of the low and middle part of the distribution should depend on three factors: (1) How much of GDP goes to profit rather than the labour share? (2) How much of the labour share of GDP goes on non-wage costs of employment and how much actually gets paid out to workers in wages? (3) Of this wage share, how much reaches low and middle earners i.e. what is happening to wage inequality?

1. Why the link between growth and wages weakened

For some on the left, it is near axiomatic that we face a long-term decline in the labour share of GDP. This argument follows that more of our national income is being sucked up into corporate profit due to a mix of technology, financialisation and de-regulation spurred in no small part by the impact of big money on democratic politics.

From a UK perspective, there has been a slight shift in this direction over time, though it is often overstated: changes in the UK's labour share accounted for only a fifth of the cleavage that had opened up between GDP and median pay since the early 1970s. But the decline in labour's share has been far more marked over recent years in some countries (like the US) than others; overall the labour share declined in the majority of OECD countries from 1990 to 2009.

Another view, more often heard from those on the right, is that workers' wages have primarily been under pressure because of rising burdens on employers, such as higher national insurance contributions, which have borne down on

pay. In the UK, along with a number of countries, these costs have certainly risen. But again, this can be overdone: in the British context it accounts for a bit over a quarter of the gap between GDP and median wage growth since the 1970s.

A more predictable, and potent, explanation of why the bottom half of workers has been losing out involves rising pay inequality: of the total sum paid out in wages, a far greater share is now going to the top half of earners than used to be the case. Rising wage inequality accounted for more than half of the gap that had opened up between GDP growth and median wage growth since the 1970s.

How these three trends are likely to evolve over the next decade and beyond is far from clear.

2. A new era of capital?

The intellectual zeitgeist expects there to be a redistribution of income over time from labour towards capital. Whether it is the rise of the robot, or Thomas Piketty's argument that $r > g$ (returns to capital will exceed the growth rate), there are certainly few countervailing voices anticipating labour will claim a larger share of national economies. This suggests two broad strategies. One is to pursue Piketty's rallying call for a decisive shift towards the (global or at least European) taxation of capital, despite all the political complexities. The other is for nations to build new institutions that ensure that some of the fruits of capital are spread among the wider population – from mass employee ownership to universal asset stakes. At the moment, it's difficult to gauge which of these feels more out of reach.

3. Rising burdens on employers?

This challenge is, at least in part, more directly susceptible to policy but it involves difficult trade-offs. A number of countries are facing tricky balancing acts between securing adequate pension savings for ageing societies – which often lead to enforced employer contributions which push up the cost of hiring – and protecting the wages of today's workers. Ensuring adequate pensions is a vital policy goal but it is likely to give rise to some problematic generational implications: in the UK, young workers are taking a hit in their pay packets to fill historic pension fund deficits, as well as having to save for their own retirement. More generally, any remaining sentiment that raising taxes on employment (as opposed to, say, profit, income or

consumption) are a wise, stealthy or progressive way of raising revenue should be put to rest. They are not. The costs of hiring should be cut not increased.

4. The inevitability of higher wage inequality?

The simple tale sometimes heard of ever growing wage inequality does not reflect the complexity of the story. In the UK for much of the decade before the crash the gap between wages at the bottom and the middle fell; while that between the middle and the very top rose. Indeed, one of the few tale-winds pushing back against the tendency for a smaller share of GDP to reach the bottom half of workers in the UK has been that increases in the minimum wage have generally outstripped average pay. The evidence on wage inequality is hardly heartening, but neither does it support policy-fatalism.

Various strategies suggest themselves (in ascending order of difficulty). First, in a period of recovery, pursue a more aggressive strategy of raising the wage floor – drawing confidence from growing research about the capacity of buoyant labour markets to absorb steady minimum wage rises. Second, there must be a resolve to turn around perennial weaknesses in education policy in countries like the UK, especially the woeful wage (and productivity) returns to many low and intermediate level qualifications. Third, the timidity that has characterised the stance taken towards the extraordinary rents that have accrued to small numbers working primarily in finance over the last decade – particularly in Anglo-Saxon economies – must, belatedly, be tackled. Finally, and most speculatively of all, is the desperate need for experimentation with new institutions and approaches that could offer employees a voice and at least some form of bargaining power, but in a manner that is compatible with the realities of relatively flexible, heavily service-dominated, open economies.

The relationship between wages and growth goes to the heart of economic performance as well as democratic legitimacy. In the UK that relationship has not broken down but in the pre-crash years it was certainly weakened. It will take a tighter jobs market, together with bold policy-experimentation in pursuit of higher wages for those at the low and middle part of the distribution, to restore it.

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MAKING CAPITALISM WORK

Eric Beinhocker & Nick Hanauer

For a generation, economists have believed that capitalism creates prosperity by using market price signals to efficiently allocate resources to their most societally beneficial uses. But what if that view is wrong and leads to economic policies that risk undermining the very foundations of capitalism itself? Capitalism is the most effective system we know of for delivering mass prosperity. But understanding *that* capitalism works is not the same as understanding *why* it works. A 21st century way of understanding *why* capitalism works will lead us to much a much clearer way of seeing *how* it creates prosperity.

1. The need to rethink economic value

The question of why things have economic value has vexed economists from the beginnings of the field. In the 1950s a consensus emerged that market prices are the best measure of worth. The French economist Gérard Debreu argued that if markets are competitive and people are rational, then markets will automatically allocate everything in such a way that society's welfare is maximised. In essence, the market price of something reflects a collective judgement of the value of that thing. A natural corollary to this view is that GDP, which measures output based on market prices, is the best way to measure the performance of an economy.

But events of recent decades have undermined this consensus. In many countries, GDP growth has not necessarily translated into rising general prosperity, particularly where there is growing inequality. And many things that markets put a positive value on – ranging from foods that cause obesity, to fossil fuels that damage the environment – have clearly decreased societal welfare rather than increased it. There have been various attempts to reform, extend or even replace GDP – notably efforts to incorporate notions of well-being. But we need to go further and rethink what wealth truly is, where growth comes from, and how capitalism really works.

2. Understanding prosperity as the accumulation of solutions to human problems

The difference between a poor society and a prosperous one isn't the amount of

money that a society has in circulation. Rather, it is the availability of the things that create well-being – safe food, antibiotics, air conditioning, etc. It is the availability of these ‘solutions’ to human problems that makes us prosperous.

These solutions run from the prosaic, like a crunchier potato crisp, to the profound, like cures for deadly diseases. Ultimately, the measure of a society’s wealth is the range of human problems that it has found a way to solve and how available it has made those solutions to its citizens. Growth then isn’t best measured by GDP. Rather it must be the *rate* at which we create new solutions to human problems. And whether growth is *inclusive* or not depends on how accessible those solutions are to people. The best functioning economies include the most people, both as creators of new solutions *and* as customers for them.

3. Understanding capitalism as a system for solution creation

Viewed from this perspective, capitalism is a system for effectively solving human problems. While capitalism may look efficient in textbooks, in the real world it has always been a messy, wasteful system of booms and busts, of successes and failures – what Joseph Schumpeter famously termed ‘creative destruction’. It is precisely this messy dynamism that is the secret of its success. Capitalism works by being a dynamic, evolutionary system of constant experimentation.

An age old challenge, however, is that in solving some problems we may go on to create new ones. A fancy new derivative may solve someone’s immediate financial problem but create systemic risks for society. Or air conditioning may help us stay cool today but harm future generations through climate change. Managing these trade-offs and conflicts falls to government.

4. Democratic institutions and social mobility to make capitalism work

In order for capitalism to work it must have institutions with popular legitimacy that can sort out the conflicting interests. When such institutions fail, become captured by interest groups, or lose their credibility, then capitalism as a system itself loses public support and becomes increasingly conflict ridden. This is why with a democratic deficit in Europe, a US system flooded with special interest money, and public distrust in the wake of 2008 and the Eurozone crisis, the foundations of the economies that delivered post-war prosperity are at risk.

In addition, the creative, problem solving genius of capitalism emerges from the diversity and participation of a broad population. The best ideas don't necessarily come from the top 1 percent. Widening inequality and declining social mobility ultimately undermine the problem solving capacity of the system itself. Broad investments in education, health, and infrastructure not only increase fairness, but are also essential drivers of capitalism's future creative dynamism and effectiveness.

In the conventional view of capitalism, government is something that interferes with and reduces its efficiency. Economic policy becomes a trade-off between efficiency and the need for societal fairness. But if capitalism is an evolutionary problem solving system, it cannot work without effective government, fairness, and inclusion. By focusing policy on enhancing the long-term problem solving capacity of the economy and including all of our citizens as problem solvers, we can deliver true growth and prosperity.

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THE ROLE OF THE STATE IN FURTHERING GROWTH

Vicky Pryce

As countries are slowly recovering from the recession that hit in 2008, the accepted new orthodoxy is one of a reduction in the size and role of the state. Odd in many ways given that the financial crisis that brought all this has, if anything, undermined the belief that markets, left to themselves, are efficient. Of course there is a need for fiscal consolidation following the rise in debt levels as a result of the crisis. And to be sure there are benefits to be had from releasing unproductive resources from bloated public sectors and reducing the 'dead hand' of the state and the layers of unnecessary bureaucracy which harm entrepreneurship and innovation.

1. Cross-country comparisons

The trouble is, however, that cross-country comparisons show little direct correlation between the size of the state and relative growth and prosperity. Instead what often makes a difference is whether there is a long term vision of the economy that the nation's economic actors in general buy into. It may be contested but at least is clear and understood by all. Arguably the Thatcher years provided that for the UK. It was based on markets, deregulation, privatisation and bringing in foreign investment to revive car manufacturing and energy sectors. It was unpopular with many, but there was a sense of direction. That clarity was lost in the 1990s and has not been recreated. The financial crisis has muddied the waters further.

Of course everyone agrees that the priority now should be on putting the economy on a sustainable path and increasing its resilience. However, apart from fiscal retrenchment not much is evident in terms of a real industrial policy. It is hard to see a proper long term strategy except vague talks of 'rebalancing'.

2. The rise of the service economy

Any new vision should resist the obvious temptation to pick 'winners'. We need to accept that even on very favourable economic assumptions it is unrealistic that we could really see a large increase in manufacturing's share of the economy. Although we can influence things at the margin, the truth is that the UK will continue to be a service dominated economy and one where a hopefully cleaned up and more productive financial sector will remain an important source of jobs and wealth. And although we are worried about regional imbalances, London, being a global city, will continue to attract disproportionate attention and investment.

3. What can the state do?

So if it can't fundamentally change the structure of the economy, what can the state do? Rather a lot, as it happens and the question is whether it can do it better. Already, through tax and benefits and through interest rate policy it alters incentives to work, spend, save and invest. It provides a large part of what we consider to be public goods, such as policing, defence, education, health and social welfare, and allocates funds between regions. It impacts hugely on corporate behaviour – the majority of the large listed companies in the UK find that their day to day actions and price setting, and hence profitability, are subject to competition rules and

other regulations which limit their room for manoeuvre – transport franchises, airport operators, supermarkets, energy and water utilities and the financial sector are all examples of that. Much of the market economy relies on government procurement of goods and services. Takeovers are scrutinised by the takeover panel. A number of banks are at present in public hands. Other companies like Royal Mail are privatised but with clear service obligations laid by the state. There are rules and obligations in relation to minimum wages, equal opportunity and pay differentials – and of course stricter rules now on bribery and corruption on international activities.

4. A risk-sharing 'horizontal' industrial policy

So the state, however we define it, is already all pervasive and in a way 'industrial' policy is shaped by what it does. But it is clearly not as effective as it could be. Productivity and investment in the UK continue to lag behind. There is an urgent need to step back, asking why the system as a whole is not producing the right outcomes and then deciding on the portfolio of interventions that can improve this. Interventions that work best are most likely to be 'horizontal', with the maximum impact on productive potential and competitiveness across the economy – e.g. improving skill levels, supporting science and R&D, investing in the country's physical infrastructure, better regulation and a fairer competition regime. There also needs to be a watching brief in areas where the UK is already strong, such as in organic chemicals and pharmaceuticals so that competitiveness isn't damaged.

4. Tackling market failures in innovation and technology

But there will still be some specific areas where market failures remain and one obvious one is the provision of risk capital for innovation and for investment in new technology. Study after study has demonstrated the importance of that area for productivity and growth, bemoaning the lack of availability of finance for early stage funding and for the development phases of individual projects. And yet the state has the borrowing capacity and general credit-worthiness, despite the knocks suffered during the financial crisis, to address this. By providing grants, loans, equity investment, guarantees and partnering more widely with potential 'growth companies' the state can reduce the cost of capital for such firms, leverage extra funds from the private sector – and then of course share in any success.

So, rather than diminishing its role, we should be encouraging the state to use the levers it already has much more intelligently. It should also engage more actively in risk sharing in innovation and technology, so that issues of short-termism, so evident through the financial system, in the UK and elsewhere, can be addressed effectively.

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DRIVING INNOVATION AND PRODUCTIVITY

Robert D. Atkinson

Innovation – the development and adoption of new products, processes, services and business models – is the prime driver of growth. Unfortunately both the United States and Europe have fallen behind. The United States runs a significant trade deficit in high technology products and Europe lags in building future industries and growing productivity. Yet, the reasons for their suboptimal performance are distinct.

1. American short-termism

America's problem stems from the pressure for short-termism. Neither US business nor the US electorate adequately focuses on the long term, preferring gains today at the expense of greater gains tomorrow. Companies in America invest 36 per cent less (as a share of GDP) in workforce training and 13 per cent less in R&D as they did a decade ago, and 30 percent less in new equipment and software (compared to three decades ago). Why invest in training, equipment, and R&D, especially basic research, when the payoffs are risky and won't accrue for years?

This reluctance to invest for the long-term stems from financial markets demanding short-term profits. As the Business Roundtable, the leading association for large American corporations, reported, "The obsession with short-term results by investors, asset management firms, and corporate managers collectively leads to the unintended consequences of destroying long-term value."

Not surprisingly short-termism has come with rising financialisation. The financial industry's share of the US economy has grown at least four-fold over the last forty years while financial sector profits increased from just 20 per cent of manufacturing profits to 145 per cent today. Combine this with what Andrew Smithers calls the 'bonus culture' where corporate leaders managers seek to maximise their bonuses and stock option values, and you get a system where the share of after-tax US profits being paid to shareholders through dividends and stock buybacks has increased more than 150 percent since the 1970s.

At the same time, US public investment is lagging. Since the early 1980s, Americans have violated the pact by which current generations invest to make the future better than the present. An ever-expanding backlog of investment needs is the price of our failure to maintain funding, as the average age of the government capital stock (which includes assets such as roads, bridges, and water systems) has increased by almost 50 per cent since 1970. Likewise, federal investment in R&D as a share of GDP is just 44 percent of 1960s' levels.

And US politics shows no easy way out. The Left rejects cutting entitlements – including to people aged sixty-five to seventy, most of whom could work – as a way to pay for needed investments, while the Right rejects increasing taxes on individuals. What they have in common is an orientation of 'me, now!' As James Lincoln Collier wrote in *The Rise of Selfishness in America*, "A nation in which most people cannot even occasionally put the good of the whole society above their own immediate gratification is bound to grow steadily worse."

2. European risk aversion

If America suffers from short-termism, Europe suffers from risk aversion. We only have to look at the EU's embrace of the 'precautionary principle' to understand how. According to the European Commission, where scientific data do not permit a complete evaluation of the risk, recourse to this principle may... be used to stop distribution or order withdrawal from the market of products likely to be hazardous. If the precautionary principle were in place when the automobile was developed, a technology that kills tens of thousands of people a year, would the Commission have approved it?

By definition, innovation leads to what noted economist Joseph Schumpeter termed 'creative destruction'. But too many in Europe want the creation without the destruction. Emblematic are comments from French Economic Minister Arnaud Montebourg who recently stated that when it comes to innovation that can destroy existing companies, 'well, we have to go slowly.' Yet 'going slowly' means 'growing slowly.'

This explains the overriding focus in Europe on job creation and the concern that productivity growth will conflict with job growth. For example, European officials look to the green economy for jobs, even though it will likely mean higher energy costs and lower productivity. But the view that productivity is the enemy of job growth has been thoroughly discredited both by history and economics.

This matters because since 1995, US productivity growth rates have been significantly higher than in Europe. And productivity is how nations get richer and how they can afford to pay for the high dependency ratios that Europe faces.

Some Europeans understand the cul de sac they are in. As Paul Giacobbi, a centre-left member of the French Assembly, states: 'The idea that nothing will change, no factory will ever close, and restructuring will not be a permanent feature is contrary to everything that the direction of the world tells us every day.' Unless Europe can accept that innovation entails plant closures and job losses, new technologies with uncertain social or environmental impacts, and new kinds of business models that will lead to business bankruptcies, it's not likely that it will be able to keep up in the race for global innovation advantage or grow productivity enough to pay for growing entitlements.

3. Embracing policies to drive innovation and productivity

So what does this mean for the centre-left in both regions? For the US it means that policy must focus on better aligning the interests of companies with the interest of the US economy. This involves rolling back the financialisation of the economy; expanding, not cutting incentives for companies to invest in the US in the building blocks of growth (R&D, skills, new equipment and software, and digital and non-digital infrastructures); and cutting entitlements to the elderly to free up budget space for sorely needed public investments.

For Europe it means putting productivity and GDP growth first, even if some firms and workers may be hurt. This will require a faith that jobs will follow. It will also need to be coupled with a continent-wide expansion of the Scandinavian 'flexicurity' system that focuses on helping workers, not by preventing change, but by maximising ability to adapt.

In a world with rapidly growing economies in the low-cost developing nations, the challenges facing old, developed regions like Europe and the United States are large. But by embracing policies to drive innovation and productivity, both can ensure that they see the 21st century as better than the 20th.

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AN INCLUSIVE GROWTH AGENDA

Tim Besley & John Van Reenen

In 2013, the LSE Growth Commission published a report into future UK growth. The aim of the Commission was to identify institutions and policies that could generate more growth in an inclusive way, guaranteeing that the fruits of future prosperity are widely shared. The report recommended that progress should be measured beyond GDP per head, especially by median household income.

The UK's experience provides an interesting case study. It had comparatively strong growth performance in the 30 years leading up to the global financial crisis in 2008. From having a per capita GDP significantly below that of France, Germany and the US in 1980, Britain halved the gap with the US and overtook Continental Europe by 2007. Changes in policies sustained by institutional reform were an important factor in Britain's improved position: tougher competition, growth of university education and, importantly, more politically independent institutions such as the Monetary Policy Committee, strong competition authorities, independent utility regulation

and the NHS's National Institute for Clinical Excellence were successful innovations. Although the UK has performed poorly in terms of GDP growth over the last 5 years, it has done relatively well in terms of employment. The flexibility of the labour market – which was an important factor in the post 1980 resurgence – has helped to mitigate the consequences of the slowest economic recovery for a hundred years. The following recommendations from our growth review stand out:

1. Raise skills and facilitate work transitions

Technological change and globalisation will continue to increase the demand for human capital. Despite an increase in education in practically every country over the last 40 years, the wage premium accruing to more skilled workers has not generally fallen as the supply of skilled workers has increased. Indeed, the return to education has risen, not just for the top 1% but throughout the earnings distribution. Increasing human capital has a double dividend – it helps to improve growth as well as reduce inequality. It should start from the earliest age and be focused on those who are most at risk – e.g. disadvantaged families in deprived areas. Interventions in schools should focus on improving teacher quality which has been shown to be more important than just spending more money. This requires good training but also rigorous selection. This will be facilitated by autonomy to schools with strong accountability to local governors and national testing. Government have to recognise the challenge and stand up to vested interests in delivering on it.

Support in key transitions to work (e.g. from school, unemployment, disability, etc.) through better training and apprenticeships and active public employment services is required. This means closer integration of the welfare system with job assistance and monitoring. Redistribution is important for a civilized society, but the right to insurance must be coupled with the responsibility to take up work for those who can.

Universities need to be autonomous, research-focused and with a loan-based system of sustainable funding which fosters quality-enhancing competition. Admission should be needs-blind with low-income families paying nothing until they are earning above average wages (as in the UK). Learning should be life-long and retirement ages must be extended to reflect the expanded human capacity to lead productive lives. Flexible labour markets will help to deliver a mix between work and other activities in later years.

2. Secure infrastructure investment

The state has an important role to play in large infrastructure investments (e.g. transport, energy, broadband and housing) where there are multiple market failures. Failure to act in the face of such market failures is as bad as acting where there is no need. Governments are always tempted to cut investment before politically visible consumption and postpone difficult infrastructure decisions. We need to create politically independent bodies to help with strategy and implementation of large projects. This should generously compensate the losers from development, reduce policy uncertainty and unlock greater investment. An example is Infrastructure Australia and the proposals of the Armitage Review in the UK. It should work in partnership with the private sector.

3. Remove bottlenecks in innovation

Competition is a key driver of innovation and a force for economic mobility. Too many policies protect large incumbents at the expense of entrepreneurs and innovative new entrants. Lack of competition in the banking sector holds up finance for start-ups. It takes far longer for productive entrants to grow to scale in the EU than in the US. We should remove many of the breaks for small firms (it is new firms that create many new jobs, not small firms *per se*). The role of finance in supporting innovation remains a challenge. The UK economy is arguably too dependent on bank finance and has insufficient innovative forms of finance which allow the sharing of risk burdens associated with supporting innovation and scaling up growing businesses.

4. A modern industrial strategy

Industrial policy should not fixate on a single sector, like manufacturing. It should be built on a clear-headed analysis of latent and actual comparative advantage, identifying which sectors are likely to grow. It should use a laser-like focus on changing policies that inhibit growth. This may involve removing regulations such as planning restrictions that limit the emergence and growth of high tech clusters. It needs to lift immigration restrictions that stifle the mobility of scientists and other talented individuals. And it needs to make best use of supportive spending policies such as targeted R&D grants in areas of national need such as promoting a greener economy.

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THE CASE FOR PRO-GROWTH PROGRESSIVISM

Michael Mandel

The many unanticipated events seen over the past 20 years should leave us with some humility about our ability to identify coming political and economic challenges. Will the next two decades be marked by surplus labour due to job-eroding technological change, or by labour shortages in countries with stagnant and ageing populations? Will wealth be concentrated in fewer and fewer hands, or will economic success become dispersed as smart people around the world take advantage of the Internet to create new businesses? Will the global economy stay volatile or return to the moderation that predated the financial crisis?

Here is what we do know: the developed, richer countries are undergoing a collective crisis of faith, rooted around slow growth. The major advanced countries have seen their real per-capita GDP rise at a depressingly low 0.8% rate over the past ten years. By comparison, the annual rate of growth was 1.8% in the ten years ending 2007 and 2.6% in the 1980s. A slow, halting recovery has left many citizens pessimistic about their country's economic prospects and their government's ability to be effective. And that pessimism, in turn, has helped nurture an ugly bestiary of political and policy dysfunction, from Washington to Brussels to Tokyo. The result is a loss of political flexibility and adaptability, a painful ossification that emphasises protecting the status quo rather than embracing innovation. This painful ossification leaves us more vulnerable to the next crisis or challenge, whether political, technological, or biological.

1. Pro-growth progressivism

Economics and politics are intertwined in a mutually reinforcing crisis of confidence. Tackling this deficit of trust is job one for the world's political leaders. Rather than just hope the global economy picks up, progressives should coalesce behind an ambitious plan to accelerate growth, boost innovation and revive upward mobility. The goal is to produce a flexible, dynamic economy that can deal with whatever challenges arise. We deserve better than a choice between the right's anti-government populism and the left's anti-business populism. That's why we need 'pro-growth progressivism'. Pro-growth progressivism will take on varied forms in different countries, but it typically has these features:

2. Focus on growth, rather than redistribution

The slow-growth figure cited above was for GDP, which includes not just wages but returns to capital as well. That means even before we get to the question of distribution, the whole economic pie is growing at an extremely slow rate. Absent more robust growth, the politics of redistribution becomes an empty exercise in moral posturing. Moreover, a narrow focus on 'fairness' may misdirect resources that otherwise could be used to enlarge the nation's productive base. It also fosters an 'us versus them' mentality that, by reinforcing polarisation, can only make it harder to build consensus around economic initiatives that benefit everyone.

Without growth, the developed countries can't generate sufficient national income to simultaneously finance public investment in world-class infrastructure, science and skills; and, meet the soaring health and retirement costs of an ageing society. What's more, we don't have the resources to deal with unexpected crisis or challenges. That's why restoring economic dynamism must be progressives' top priority. Putting the cart of redistribution before the horse of economic growth turns politics into a zero-sum fight over a shrinking pie. This approach might win an election here or there, but it is not a durable foundation on which to build and sustain progressive majorities.

2. Put a priority on investment, rather than consumption

An essential ingredient for encouraging growth is investment in physical, human, and knowledge capital. Investment is spending on the future. By contrast, consumption, almost by definition, is about the resources devoted to today's needs and pleasures. But these are just the economic definitions – investment and consumption also represent different attitudes towards the future and towards the next generation. Right now the developed countries are ageing in a way that has more and more older citizens being supported by a slow-growing or even shrinking working-age population. To make that work, the younger generation needs updated infrastructure, the newest equipment, the best education and training, and the most innovative technologies – and all these require resources.

3. Encourage innovation and entrepreneurship, rather than business as usual

In addition to investment, true growth needs innovative ideas and technology and the entrepreneurs to put them into practice. And it needs government to

encourage innovation, or at least not get in the way with excessive regulations. One good example: The Internet of Things – the idea that in the future, all objects will be interconnected and have the ability to automatically transfer data without requiring human-to-human or human-to-computer interaction. The Internet transformed digital industries, which represent about 20% of the economy. But the Internet of Things has the potential to transform physical industries, such as manufacturing, transportation, public service and healthcare, which represent the other 80% of the economy. The Internet of Things could make an enormous difference in growth and job creation – but only if excess government regulations don't make it too expensive or time-consuming to put into place.

4. Mobility flows from innovation and growth

One of the great advantages of growth and innovation is that they create more opportunities for true mobility. That's certainly true in the United States, where growth in the tech/info sector has drawn more minorities into well-paying jobs. From 2006 to 2013, the number of Hispanics in computer and mathematical occupations rose by 58% and the number of blacks rose by 41%.

5. Foster innovation in government

Government has an essential role to play in pro-growth progressivism, providing the necessary safety net and the regulatory structure that makes the economy work. At the same time, progressives must focus on making government work better, so that it's felt as a positive force in people's lives. One aspect of innovation in government is an emphasis on flexibility, rather than strict rules. In the United States, PPI has proposed a Regulatory Improvement Commission, which would focus on making regulations better and more flexible, rather than doing away with them altogether.

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PREDISTRIBUTION AND MONETARY POLICY

Thomas Aubrey

The current debate around the declining returns to labour and why most workers are not benefiting from rising productivity growth has to date identified two main culprits: the intensity of globalisation and to a lesser extent the substitution of capital for labour. Both of these factors have had a depressing effect on nominal wage growth. However slowing down globalisation and technological progress to try and increase nominal wages is not a viable option given that these are the drivers of economic growth that determine the size of the pie to be split between labour and capital. This downward pressure on nominal wages has also coincided with central banks in most advanced economies embarking on policies to stabilise the general price level. Given that the growth in real wages is determined by two factors: nominal wages and the general price level, governments ought to also be thinking how falling prices might stimulate real wage growth. This can be achieved by implementing a productivity norm – supported by numerous economists from both left and right prior to the 1950s. This would require central banks to target nominal income with prices being allowed to fall in proportion to rising productivity.

1. A stable price level does not necessarily mean a prosperous economy

The benefits of productivity growth are no longer flowing through to workers. Depressed median nominal wage growth in conjunction with policies to stabilise the general price level has prevented real wages from rising. In a globalised world monetary policy is therefore redistributing the rewards of productivity growth from labour to capital with significant implications for future GDP growth and job creation. Low to middle income groups have a higher propensity to consume, hence declining median real wages leads to falling aggregate demand and potentially a lower rate of job creation.

2. Deflation is not always bad

The debate on falling prices has been overshadowed by central banks failing to distinguish between good and bad deflation. Bad deflation is the deflation that arises when a slump in aggregate demand results in rising unemployment, falling wages and lower investment creating a vicious circle of economic decline. Good deflation

occurs when rising productivity growth leads to falling prices which is exactly what has been happening in the technology sector over the last 30 years. However, many economists believe that deflation in all its forms is bad arguing that: debtors are disadvantaged because it increases the value of their debts; profits fall leading to lower investment and wage growth; and consumption falls as consumers wait until prices stabilise. Such arguments are misplaced when it comes to good deflation as the real income of debtors has also increased so they are not necessarily any worse off. An analysis of the US Technology sector shows that despite a dramatic fall in producer prices since 1990, the sector outperformed the broader stock market by nearly 70%. Indeed, the idea that consumers panic about the dropping price of tablets only to buy once they see price stabilisation clearly does not fit the facts.

3. Inflation indices often ignore crucial items such as house prices

House prices in almost all OECD countries have risen faster than real wages meaning that an ever greater portion of a household's income is being directed to pay for housing services. In the UK, the ratio of house prices to income has roughly doubled since the 1960s resulting in a substantial increase in spending on housing services. The economic benefits of high and rising house prices are now being increasingly questioned given that this reduces the purchasing power of consumers making them poorer. Although rising house prices does increase consumption by home owners, it does so generally at the cost of increased borrowing, which the financial crisis amply demonstrated is not sustainable.

4. Falling prices does not necessarily mean falling wages

Orthodox economists tend to dislike falling prices arguing that it will drive down nominal wages leaving everyone worse off. But wages tend to be sticky with employers reluctant to drive down nominal wages. Moreover, there have been numerous periods in history where the general price level has fallen with rising real wages including Britain between 1873 -1896 and the United States in the 1920s. Indeed, between 1700 and 1939 there was no real discernible trend in prices although real wages did increase.

5. Marginally higher real interest rates once the European economy has emerged from the slump has numerous benefits

Such a shift in the monetary regime would lead to higher real interest rates.

Although this would be bad for heavily indebted consumers and companies who took on too much debt because of excessively low real interest rates during the Great Moderation, there are also benefits. Firstly, it would permit productivity benefits to be passed on to workers in the form of falling prices thus driving up real wages, increasing aggregate demand and the rate of job creation. Another major benefit of the productivity norm is that it can prevent large scale financial crises by limiting excessive credit binges.

An increase in productivity growth drives up profits, which in turn leads to an expansion of credit and rising systemic risk. A productivity norm would require the central bank to adjust monetary policy to stabilise nominal income which would result in higher real interest rates thereby increasing the cost of credit and curtailing its growth. Finally, slightly higher real interest rates would force companies to continue to drive productivity growth as a source of its profits given that they would not be able to benefit from ultra-cheap financing and relatively lower exchange rates. This was indeed the case between the mid-1970s and 1980s with West Germany, which demonstrated rising productivity growth in conjunction with higher real interest rates.

Rising inequality in conjunction with stagnant real median wages is not a good foundation for a prosperous society. In an increasing globalised world which places downward pressure on nominal wages, monetary policy ought to permit the rewards of productivity growth to be passed on to workers in the form of falling prices. Targeting nominal income growth to equal the growth rate of total factor productivity instead would allow prices to fall in proportion to productivity growth, thus allowing the broader workforce to benefit from its productive activity.

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TOWARDS A LEARNING ECONOMY

Peter van Lieshout & Robert Went

In an 'Open letter from concerned industry leaders' on January 13th 1976, the chairs of nine of the largest Dutch companies (including Philips, Unilever, Shell and Akzo) turned against the most left-wing government the Netherlands has seen. The nine business leaders stated that in "the public debate, the interest in distributional questions dominates almost completely", and that "production problems were mostly neglected". "As if that which has to be distributed comes into being independently and is not obtained through continuous effort and resolute reactions by all those involved", they added. Refusing a meeting with concerned CEOs, like the prime minister Joop den Uyl (PvdA) did at the time, is unlikely to happen nowadays. Even the left now listens carefully, according to some too much so, to the wishes and demands of entrepreneurs. But even now, the content and development of the production side of the economy is left by both right- and left-wing politicians to 'the market' and 'the private sector'. Likewise, for most economists, companies and production are simply a 'black box'. This has to change.

1. Innovation and industrial policy in a global world

The question of how a country can earn its living in the long term will become more central. The period of more or less self-evident growth is over, which also means a change in the political agenda. It is high time for the development of a strategic vision on earning potential. Especially now, in a globalising world with increasing interdependencies, it is essential to approach economic policy, education and knowledge policy, social policy, and regional and international policy in a coherent way, for the purpose of the innovative and learning potential of the national economy, its businesses, and the citizens. It is also crucial to organise a fitting governance-structure.

2. Invest in earning potential

In answering the question of how governments can best encourage the development of the economy of their country, linear predictions are often looked to. Attempts are made to extrapolate from the current situation as to what will be the interesting markets, sectors, and/or technologies of the future. However, especially in the long term, that is a risky strategy. After all, the best

prediction is that things will continue as we currently think. Another path is also possible, namely, strengthening earning potential. This concerns equipping infrastructure, institutions, and human capital to ensure they are able to respond to changing circumstances. In the long run, this offers a more robust chance of economic growth, fits better with an increasingly complex world, and offers the best possibilities for independent policy making.

3. Map out a learning economy strategy

What this means concretely is different for every country; the time of one-size-fits-all approaches – such as the neoliberal Washington Consensus – is long since behind us. For the Netherlands, the WRR puts forward a series of proposals on how to implement these ideas in its report 'Towards a learning economy'. Based on extensive literature research and visits to 16 countries, the steps governments can take to encourage growth are mapped out.

The challenges that this mapping out process must grapple with include: dealing with the way in which the process of globalisation unfolds; managing scarce resources, such as people (the workforce will shrink) and capital; and playing into the large changes taking place in the way in which goods and services are produced, for which global value chains are of great importance, and innovation is not primarily through R&D but happens everywhere in the chain.

4. Knowledge is a key factor of production

This all points towards the conclusion that countries in Europe like the Netherlands need to put much more emphasis on knowledge as a factor of production. The main challenge is not to implement this as is usually done, through stimulating the production of knowledge, such as in the form of fiscal facilities for R&D, but through enlarging the capacity for knowledge absorption and improving the organisation of knowledge circulation: these are both much more relevant in the current time than the traditional form of knowledge production.

5. Invest in learning

Whereas in the knowledge economy, the development of knowledge was central, and the focus was mainly on a (small) group of top talent, the learning economy has a broader view. A learning economy does not primarily mean that

everyone continues to go to school, but that knowledge and skills circulate. The learning economy focuses its attention on the essential task of finding out which types of knowledge can develop, how this knowledge is exchanged, and how learning can take place more widely (learning of consumers, analytical learning, technical learning, learning of skills, learning within an organisation, institutional learning, corporate learning, etc). Everyone, from top to bottom, has to be able to handle new ideas and changing circumstances. This necessitates changes in the education, academic, and knowledge systems.

6. Prioritise institutional responsiveness

Lastly, it is important to ask what this approach focused on responsiveness requires from regular institutions. This should be based on five main themes: a social security system and labour institutions which focus primarily on the permanent link between learning and working; more flexibility on a regional level; a more strategic innovation policy (not just in industry but also in the public sector and for services); national institutions that fit better given the challenges facing us and which do not focus primarily on redistribution; and lastly a pragmatic EU and globalisation strategy in which responsiveness is prioritised and a new balance is sought between national and cross-border rules and institutions.

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EXTENDING THE DOMAIN OF GLOBAL GOVERNANCE

Saskia Sassen

The pathologies of today's global capitalism are becoming a formidable problem for Europe and North America, and the globe generally. The past two decades have seen a sharp growth in the number of people, enterprises, and places expelled from the core social and economic orders of our time. This tipping into radical

expulsion was enabled by elementary decisions in some cases, but in others by some of our most advanced economic and technical achievements.

1. Global governance organising logics

How does complexity produce brutality? Part of the answer concerns the logics organising some of today's major order-making systems in domains as diverse as global environmental protection and global finance. Let me illustrate very briefly my argument with two cases. The main policy 'innovation' in interstate agreements to protect the environment is carbon trading, which means, practically and brutally speaking, that countries will tend to fight for expanding their right to pollute so as to either buy or sell a bigger quota of carbon emissions.

In the case of global finance, its organising logic has evolved into a relentless push for hyper profits and a need to develop instruments that enable it to expand the range of what can be financialised. That led to a willingness to financialise even the livelihoods of those who lose everything if the instrument backfires. This was the case with the type of sub-prime mortgage launched in 2001 in the United States. What is perhaps still misunderstood is that this was a financial project aimed at profits for high finance. It was not aimed at helping people on modest-incomes buy a house, and hence the opposite of the state projects launched decades earlier.

The capacities furthering the developments of these systems and innovations are not necessarily intrinsically brutalising. But when they function within particular types of organising logics they become so. The capacity of finance to make capital is not inherently destructive, yet it is a type of capital that needs to be put to the test: can it be materialised into a transport infrastructure, a bridge, a water-cleaning system, a factory?

2. We are confronting a global dynamic of expulsions

The language of 'more' – more inequality, more poverty, more imprisonment, more foreclosed homes, more internecine wars, more environmental destruction- is not enough to capture these trends. It is time to recognise that we are confronting a dynamic of expulsions. This also means that, once expelled, these people and places fall outside our standard measures. At some point the long-term unemployed will no longer be shown in the statistics, nor will the small enterprises whose owners committed suicide because they could not get loans, and neither will the sharp

increase in the number of dead water and land zones get included in our maps of the world. One major challenge that needs to be addressed is that such expulsions can coexist with economic growth as counted by standard measures.

These and other conditions are not typically part of global governance. But when they reach these sharp scale-ups, they better be. They are a sort of ground-level geopolitics that is reshaping our world. When young people are increasingly unemployed across the world, this is no longer a national issue. Nor is the massive destruction of national environments. These logics of expulsion are now among the most acute challenges facing our global political economy.

3. Reinventing the vocabulary of global governance

Further, these trends bring to the fore the fact that forms of knowledge and intelligence we respect and admire are often at the origin of long transaction chains that can end in elementary expulsions. Our standard global governance instruments are not quite useful enough to address this mix of thick locality and a global scale-up fed by the recurrence of these destructions in country after country.

The diverse processes and conditions I include under the notion of expulsion all share one aspect: they are acute. While the abjectly poor worldwide are the most extreme instance, we must reinvent the vocabulary of global governance to include such diverse conditions as the impoverishment of the middle classes in rich countries, the destructive mining practices in countries as different as the United States and Russia, the eviction of millions of small farmers in poor countries due to the 220 million hectares of land acquired by foreign investors and governments since 2006. Then there are the countless displaced people warehoused in formal and informal refugee camps, the minority groups in rich countries who are warehoused in prisons, and the able-bodied unemployed men and women warehoused in ghettos and slums.

The globalisation of capital and the sharp rise in technical capacities have produced major scaling effects. What may have been minor displacements and losses in the 1980s, such as deindustrialisation in the West and in several African countries, had become devastations by the 1990s (think Detroit and Somalia). To understand this scaling as more of the same inequality, poverty, and technical

capacity is to miss the larger trend. Similarly, we have been using the biosphere and producing localised damage for millennia, but only in the last thirty years has the damage grown to become a planetary event that boomerangs back, often hitting sites that had nothing to do with the original destruction, such as the Arctic permafrost. And so on with other domains, each with its own specifics.

We need to bring these trends into the frame of global governance. Yes, they mostly happen deep inside countries. But when they recur in country after country they become a sort of de facto global condition that should be part of the global governance agenda. These developments may well have a greater impact on the shaping of our world than the rapid economic growth in India, China, and a few other countries.

*Saskia Sassen is the Robert S. Lynd Professor of Sociology and Co-Chair, The Committee on Global Thought, Columbia University. Her new book is **Expulsions: Brutality and Complexity in the Global Economy** (Harvard University Press 2014)*

CITIES ARE THE FUTURE OF EFFECTIVE DEMOCRACY

Benjamin Barber

Despite its bombs and bravado, its long history of sovereign independence as well as its boast of being democracy's conservator for the last 400 years, the nation state is everywhere at risk. As Daniel Cohn-Bendit and Felix Marquardt wrote last year, 'the nation-state is fast becoming obsolete.' That may be an overstatement, but in our new global world, bordered and blinkered independent states are confronting global, interdependent problems they seem powerless to address.

Every challenge we face today is a function of interdependent forces: climate change, terrorism, economic markets in labour, commodities and capital, health pandemics, crime, drugs, weapons of mass destruction, and technology are global in their causes and consequences. No Paris warming, only global warming;

no one-city flu, but global maladies like Mexican pig virus and Hong Kong flu and West Nile virus; no state-based war, but malevolent NGOs like al Qaeda and civil wars that know no patriotism.

We have HIV without borders, markets without borders, war without borders, immigration without borders, a digital web without borders, but we do not have citizens without borders or democracy without borders. This devastating asymmetry between problems and responses puts the future of our planet at peril. The key to solving the puzzle lies in cities. Cities are the future of both effective democracy and global governance.

1. Cities create much of the problem, let cities contribute significantly to the solution

Time, in short, to change the subject: from states to cities and from prime ministers and presidents to mayors. Let mayors and their neighbours, the citizens of the world's cities, address climate change, regulate carbon, deal with immigration, share intelligence, forge common practices, and thus secure sustainability through cooperative action.

There are good reasons why cities can effect changes nations cannot. We have always been what Edward Glaeser calls 'an urban species.' Today more than one half of the world's population is comprised by urban dwellers, in the developed world, more than three quarters. China is growing new cities of more than a million at a dizzying rate, while global megacities in Africa and Latin America are making New York and London look positively modest. Moreover, nearly 80% of GDP as well as 80% of green house gases are generated in cities.

If cities can maintain access to their resources and act with some autonomy in the face of the obstructive national governments to which they are constitutionally subsidiary, they can become an alternative governance infrastructure as creative and restorative as the alternative energy infrastructure aspires to be.

2. More human in scale, city leaders are more trusted by citizens

Cities are much more than simply one more 'level of government administration.' They are avatars of our human identity. City identities reflect our core being. Cities

are where we are born, where we are educated and grow up, where we work, play, pray and create, where we are married, have children, get old and die. Cities are home, cities are us.

The city stands at the beginning of our history. Human civilisation was born in cities, and democracy was first nurtured in the polis. Cities are the most enduring of political bodies. Rome is much older than Italy, Istanbul older than Turkey, Boston older than the United States, Damascus older than Syria. Cities define our essential communitarian habitat in a way that nations cannot. For nations are too large for participation and engagement but too small to control and contain the global centres of power. Too big for community and association but too small for the world economy. Cities are closer to us, more human in scale, more trusted by citizens. Where less than half of Americans trust the President or the Supreme Court and less than ten percent trust the Congress they themselves elect, 70% or better trust their mayors and municipal councilors. Such trust figures surround municipal government throughout the world.

3. Create a global parliament of mayors, linking urban networks to tackle global problems

Cities are not only more pragmatic and grounded and participatory than nation states – ‘participatory budgeting’ has become a favoured innovation of cities world-wide – they are also cooperating to address issues like climate change. The old global environmental coalition of cities called ICLEI has been joined by the newer C-40 and together are developing common measures to combat greenhouse gases – 80% of which are generated in cities. Los Angeles has cleaned up and greened up its port, New York has improved its old housing stock with new insulation and white-painted roofs, while Bogota has developed rapid transit surface lines on segregated highway lanes, with significant reductions in emissions being achieved in all three cities.

The United Nations has been of little help in resolving toxic global issues. United Cities and Local Governments (UCLG), perhaps the most important global association no one has ever heard of, had facilitated practical steps to fashioning common urban solutions to global problems. That is why in the last chapter of *If Mayors Ruled the World*, I have proposed a Global Parliament of Mayors (GPM) as

a linkage of urban networks, a keystone in the expanding arch of international associations embodying urban cooperation. It is telling that the process has moved from paper to practice, and has already yielded a process in which city networks, mayors and civic NGOs are meeting to plan a GPM convening, possibly, in 2016.

The *polis* was once the birthplace of civilisation and democracy: today, the cosmopolis beckons – not just an alternative to the incompetence and disorder of declining nation states, but an inviting option in creating global comity and justice on an interdependent planet that demands forms of civic cooperation cities alone seem capable of providing.

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ETHNIC DIVERSITY AND THE FUTURE OF SOCIAL SOLIDARITY

Bo Rothstein

Is increasing ethnic diversity bad for social trust and thereby for the future of social solidarity? This issue has become a central topic both in public debate and research. Many empirical findings show that societies with a high ethnic diversity tend to have lower social trust and hinder support for redistribution. This argument has not gone without criticism and several studies have pointed out that ethnic diversity does not necessarily, or only under certain specific conditions, destroy social trust. In a recent overview of this research, including an analysis of no less than 480 empirical findings from 172 studies, Merlin Schaeffer shows that many studies about this controversial issue reach very different conclusions. This inconclusiveness is, according to his analysis, due to variation in research design such as which region of the world is analysed, which type of ethnic diversity is scrutinised and also what type of measure is used for social solidarity.

1. Quality of government and social trust

What is missing in most of these analyses is a variable of some significance, namely the quality of government. Three recent empirical studies have shown that if the quality of government factor is brought in, the negative effect of ethnic diversity on social trust either disappears or is strongly reduced. Using a survey from Sweden containing detailed questions about perceptions of how fairly respondents were treated by government authorities, Staffan Kumlin and I found that for (non-Nordic) immigrants, perceptions of having been treated fairly by government authorities and public services had a significant positive effect on their social trust, even when controlling for income, left-right orientation, being unemployed, membership in voluntary associations, age and gender.

Peter Dinesen studies what happens to immigrants from very low trust countries that have come to Denmark, which has the world record in social trust. His finding is that the immigrants' perceptions of Danish government authorities have a strong impact on their social trust. Those who perceive that the Danish institutions treat immigrants and native Danes evenhandedly are much more likely to 'trust other people in general.' With a special focus on young first and second generation immigrants, Dinesen found that perceptions of institutional fairness at an early age contribute to the general adaption of immigrants to the high level of trust of native Danes.

The third study is built on two surveys carried out by my colleagues and I at the Quality of Government Institute at the University of Gothenburg in 2010 and 2013. The 2010 sample consisted of about 34,000 citizen interviews and the more recent survey sampled over 85,000 individuals. The respondents have been sampled by regions in European countries, in total 212 regions within 25 European countries. These surveys have focused on citizen perceptions and experiences of the quality of their regional government institutions (the police, public health care and public schools) and included both perceptions regarding fairness and impartiality as well as questions about personal experiences of corruption.

2. The (negligible) impact of ethnic diversity on social trust

These surveys show that the regional-level variation in social trust across Europe is

striking, ranging from a mere 8 percent of high social trust in Východné Slovensko region in Slovakia to a stunning 80 percent in the Copenhagen region in Denmark. There are also large differences within countries. Taking advantage of this huge variation within Europe, our study shows that the effect of ethnic diversity (measured as the percentage of people in each of the 212 regions that are born outside Europe) on social trust becomes negligible when the quality of government is included as a variable.

In other words, in regions where people perceive that their public authorities are corrupt, dishonest, discriminatory and/or partial, ethnic diversity does have a negative effect on social trust and thereby on the possibilities for social solidarity. However, in regions where people perceive that their regional authorities are impartial, honest and non-corrupt, etc., the effect of ethnic diversity on social trust becomes insignificant.

3. Improving quality of governing institutions to increase social solidarity

Citizens facing increased diversity in a society with low quality of government may start thinking that people that are from a different ethnic group are getting away with overusing or misusing public and social services and therefore they should not be trusted. However, this type of suspicion is less likely in a society with high quality government which implies that 'people in general can be trusted'. Other theoretical interpretations are for sure possible but as I see it, the message from this research is pretty clear. Yes, ethnic diversity can spell trouble for social solidarity but only in societies where the quality of the government institutions is low.

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ADDRESSING THE UNDERLYING CAUSES OF POPULISM

René Cuperus

Over the past few decades, mainstream European parties and leaders have been experiencing a dangerous populist revolt, accused of being an elite,

unrepresentative political 'class.' These economic and cultural elites advocate their 'brave new world' of the bright, well-educated, entrepreneurial and highly mobile. Amongst the population who don't fit into this description, the TINA-project is creating fear and resentment. The deterministic image of a future world of globalisation, open borders, free flows of people and lifelong-learning in the knowledge-based society is a nightmare for some.

Karl Polanyi taught us that "nowhere has liberal philosophy failed so conspicuously as in its understanding of the problem of change. (...) A process of undirected change should be slowed down, if possible, so as to safeguard the welfare of the community". Populism is an alarm signal that points at failing management of societal change, and of the anxieties and insecurities which are produced by rapid socio-economic and cultural transformation. Populism in that sense is a revolt of distrust against a world that is changing too rapidly, and where traditions, identities and securities are no longer respected.

The historical compromise or alliance between the labour movement and the cultural elites, between the working class and the academic professional middle class around the project of the welfare state, have been put under strain because of changes in lifestyle, value orientations, migration, labour market and social mobility patterns.

For that reason, the populist revolt is situated exactly at the 'liberal versus communitarian value divide' (David Goodhart), the fault line between middle-class liberals and lower middle-class communitarians. Higher educated academic professionals favour individual rights and cultural openness, are highly mobile, pro-diversity and pro-immigration, soft on criminals and green on the environment, and tend to benefit from globalisation both economically and culturally. Lower educated, non-academic professionals, tend to favour collectivist view of rights and community membership. They have strong emotions about welfare free-riding, and are sceptical about mobility and mass immigration. They value the familiar and the local, are hard on crime and soft on green issues. They feel uncomfortable with globalisation, because they tend not to benefit from it.

1. Rehabilitating the nation state

The gospel of the post-national, cosmopolitan pundits favour new regional power centres. Yet unstable and dislocating undercurrents in European society require not only prudence in (the discourse on) modernisation and innovation, but also the rehabilitation of the nation state as a forum for restoring trust, as an anchor in uncertain times, as a source of social cohesion between the less and the better educated, between immigrants and the autochthonous population.

Populism is a revolt against (the post-national narrative of) globalisation and Europeanisation. A revolt against the laconic self-abolition of the nation state, i.e. national democracy and the national welfare state. A restoration of trust between politicians and citizens will therefore have to take place first and foremost at the national level – the only tested legitimate arena for democracy.

2. Modernising traditional party politics

The precondition for regaining political trust is also the renewal or even reinvention of the *Volkspartei*, as a bridge between the winners and losers of the new world trends. This new 'People's Party' might emerge from coalition-building encompassing coalitions with new social media and civil society actors. They need a new deal between the privileged and the less privileged: a pact of socio-economic security and cultural openness, forging a new idea and self-confident direction of progress. It should also be based on a sensibility for cultural and identity politics, as one of the big discontents in affluent welfare democracies is to a large extent about community, social cohesion, fairness and security.

3. A new centre-left political economy

Populism emerges from the vacuum created by the eroding left/right divide in politics, replacing it with the populist cleavage of 'the establishment' versus 'the people.' This perception, indeed, poses a potential threat to the pluralist and constitutional dimensions of democracy. It is crucial to restore the divide between left and right in politics. An alternative centre-left political economy should be urgently designed and developed, as an alternative scenario to adapt to new global trends.

Social democrats have played their own part in deregulating the financial markets. After the big shock, they seem to be lost. They are not on the offensive like the neoliberals, nor on the defensive like right-and left-wing populists. They have lost the framing battle of the crisis and are yet to come up with a convincing narrative.

What we need is a political economy where innovation and entrepreneurship are central issues, not markets and greed. A social political economy that pays tribute to the central role of human capital in both our private and public sectors. A political economy in which the real economy is not overpowered by the financial economy. A centre-left social-democratic agenda should entail again the concept of 'good capitalism' (Will Hutton).

Such an agenda would focus on smart industrialisation; the quality of work in the private and public sector; rebalancing the position of professionals vis-à-vis management and including new possibilities of social mobility; offering ample opportunities of schooling on the job (the Rhineland model of the social market economy); a better balance between work, family and care in the course of life (the Scandinavian experience); stimulating innovation, sustainability and entrepreneurship, also regionally, in industry as well as public services; strengthening the position of young starter-entrepreneurs without employees, who simply don't fit in our old-fashioned welfare state schemes; bringing in a new public spirit of responsibility both in the private and public sectors.

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section two

JOBS, WAGES & SKILLS OF THE FUTURE

THE RISE OF THE SERVICE ECONOMY

Anne Wren

One of the fundamental socio-economic challenges facing the advanced democracies in the first decades of the new century remains that of structural adjustment to the decline of the industrial economy. In all countries (even an industrial powerhouse like Germany) the proportion of the working age population finding employment in traditional sectors (manufacturing and agriculture) has steadily declined – to less than fifteen percent by the turn of the century. The task for the left at this point is to develop politically and economically sustainable strategies for service sector employment expansion which do not imply serious compromises in terms of equity.

1. Equality and employment expansion in low-productivity service sectors

Any strategy which relies too heavily on low productivity, and largely non-traded, service sectors (for example, personal and social services, health) without an accompanying expansion in more productive economic areas, is unlikely to be economically sustainable. And some strategies also have negative implications for equality. The private sector route to low-productivity service expansion, for example, (pursued most prominently in the US) has relied on an unequal distribution of earnings to keep down the prices of personal and

consumer services, allowing a demand expansion to take place. This is only part of the story though: in recent decades the expansion of consumer and personal services in the US has also been driven increasingly by debt-fuelled consumer demand.

As is equally well-known, social democratic countries continued to achieve high levels of service employment expansion in this period (to varying degrees) without making the same levels of sacrifice in terms of equality, or incurring the same levels of private sector debt. But they have done so in part through the expansion of employment in public service sectors, financed by high levels of public taxation. In continental welfare states like Germany, meanwhile, high levels of wage equality and low levels of consumer demand, and limited public service provision, have combined to limit the availability of service sector employment opportunities compared with other countries, and hence also the number of citizens who are able to participate in the labour market.

2. The need for expansion in high productivity service sectors

A focus on expansion in low-productivity service sectors then raises the prospect of a particularly unappealing set of political choices between outcomes such as employment creation, equality, taxation, and public and private sector indebtedness. Of equal importance, however, none of these strategies is, on its own, a sufficient long-term solution to the problem of de-industrialisation. Without a thriving set of high value added sectors to finance them, the expansive public service sectors of Scandinavia are ultimately unaffordable. Without the existence of a core group of well paid workers in high productivity export sectors, the large numbers of early retirees and women working within the home in Germany and other continental European countries cannot be supported.

The strategy of expanding employment in low productivity private services, meanwhile, relies not just on low relative wages and prices, but also on rising incomes, and, as the liberal experience of the past decade has shown, an over-reliance on the expansion of credit and 'wealth illusion' rather than productivity and income growth as a basis for the expansion of demand and employment in these sectors, is both unsustainable and economically costly. Any sustainable strategy for employment growth must depend instead on the expansion of

output and employment in high productivity sectors and, in a context of de-industrialisation, this means that expansion in high productivity, traded, service sectors, like business services, communications, and finance, is increasingly key. So what does this mean in terms of policy?

3. High productivity service expansion requires college educated labour

One distinguishing feature of the group of high productivity, traded service sectors ('dynamic' service sectors) is that they are typically far more reliant on the new information and communications technologies (ICT) than other types of economic sectors. This has important implications for skills policy. There is strong empirical evidence that ICT and college educated labour are complements in production. ICT can substitute for a range of tasks which can be described by programmed instructions and which are typically carried out by workers with medium-level skills (secondary, or incomplete college education). As a result its diffusion tends to reduce the demand for labour at these skill levels. ICT is less effective, however, at performing non-routine cognitive tasks requiring more flexible problem solving skills and cannot substitute for managerial decision-making. Rather it serves to complement the skills of the (typically college educated) workers who perform those tasks. ICT diffusion therefore increases the demand for college level skills, and effective expansion in sectors which are ICT intensive requires that college level skills be adequately supplied.

4. Public investment in education as early as the pre-primary level

A well-designed strategy for educational investment also has the potential to counteract the polarisation of labour market outcomes associated with the transition to services and the diffusion of ICT. However, the key is in the design. The private sector route to tertiary investment pursued in the US, the UK, and elsewhere in recent decades has had negative consequences in terms both of equity and efficiency. First, it is reliant on high levels of wage inequality to incentivise individual investment in (increasingly expensive) education. Second, it has resulted in a rather unequal distribution of skills and, given the increasing cost of tertiary education, there is a high risk that this distribution will be replicated across generations. Third, it has been associated with increasing levels of individual indebtedness. Finally, and critically, the evidence suggests that it has been ineffective as a strategy for ensuring an adequate supply of skills for ICT

intensive labour markets, with further negative implications for equality as the demand for highly-skilled workers outstrips supply.

Public funding of education is therefore essential not only for the purposes of equity, but also to ensure an adequate supply of workers with the appropriate skills for a dynamic service economy. Crucially though, the focus of investment should not only be on the tertiary level itself. An increasingly strong body of empirical evidence points to the critical importance of investment in early childhood education to achievement at the tertiary level – especially for children from low-income families.

5. Facilitate women's participation in the labour market

The expansion of the service economy offers a significant opportunity to increase the participation of women in the labour market, since women have a comparative advantage in service provision (compared with industrial or agricultural production). Increasing women's access to labour market opportunities has obvious advantages in terms of equity: it is also essential to ensuring the sustainability of welfare state provision in the face of the burden of population ageing. Most countries could do much more to facilitate women's access to the labour market, however. Here again investment in early childhood education can play a role as part of a much needed broader strategy for public subsidisation of childcare for children and elders: the costs of caring are still overwhelmingly borne by women, forming a substantial obstacle to participation in paid employment. In tandem with these policies, more steps must be taken to facilitate the provision of meaningful and appropriately remunerated and protected part-time employment. In political terms, parties of the centre-left are well positioned to pursue this agenda: the demand for these types of policies amongst women in particular is well recognised, and is closely linked with their higher levels of support for the left.

*Anne Wren is a research associate of the Institute for International Integration Studies at Trinity College, Dublin. The arguments draw on Anne Wren (Ed.) (2013) *The Political Economy of the Service Transition* (Oxford University Press)*

CLINGING ON TO A MIDDLE CLASS LIFE?

Brian Bell & Stephen Machin

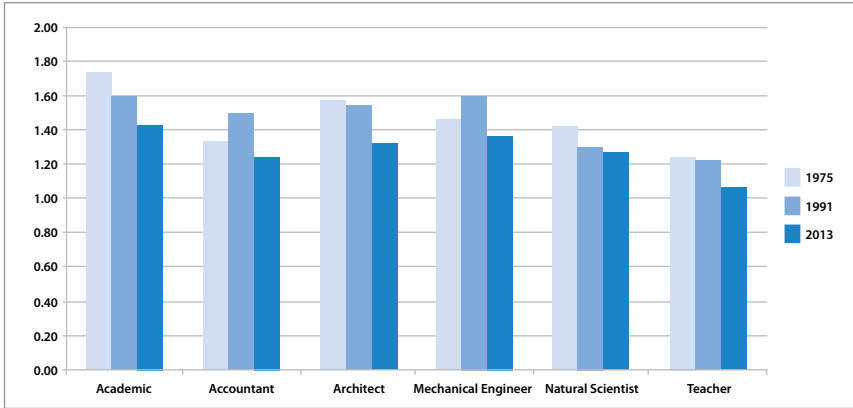
Labour markets in advanced economies have changed fundamentally over the last few decades. In many places, wage differentials by education have increased substantially and those toward the top of the wage distribution have done better than those further down over an extended time period. At the same time a polarisation of jobs has occurred, with those in occupations performing tasks that require mainly routine skills facing additional pressures as technology has replaced such work.

The standard policy recommendation in light of these developments has been to focus on raising the education levels of the population to better equip workers to face the challenges of the new labour market. This is surely right. But there is a risk that policymakers fail to notice the relative deterioration for a diverse group of occupations that employ workers who are highly qualified and would historically have been able to live a very comfortable middle-class life – but may not be able to sustain such a lifestyle today.

1. Middle-class jobs, middle-class wages?

There are many white-collar occupations that employ large numbers of graduates and where work involves non-routine tasks. The opening paragraph would suggest that such occupations should have outperformed others over the recent past. Yet there is a surprising amount of variability, with the evidence suggesting that many of these occupations have fared worse than the average and at the same time they have failed to maintain their share at the top of the earnings distribution.

To see this, we selected a set of occupations for the UK in 1975 and 2013 that could be consistently tracked and that would surely be considered solidly middle-class. These occupations are now almost uniformly graduate-only and would have been predominantly so in the 1970s. Examples include academics, natural scientists, mechanical engineers, accountants and teachers. We computed the average (mean) wage in each occupation and compared it with the average wage across all occupations.

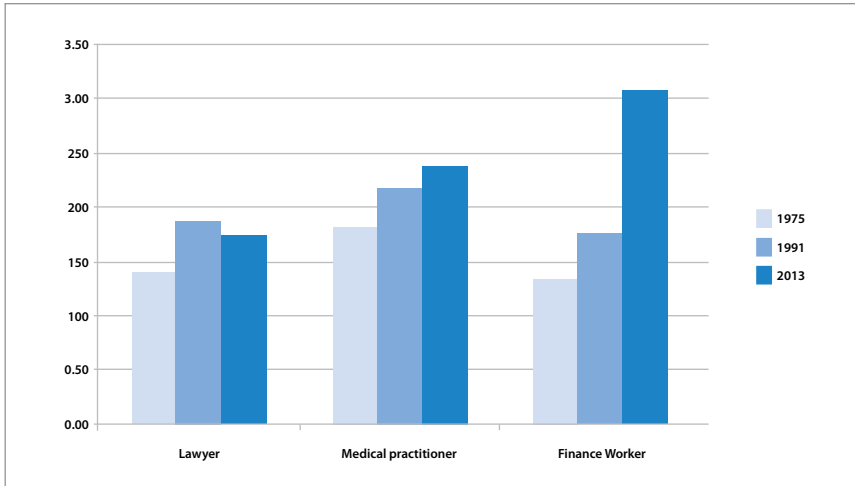


To be sure these are still relatively well-paid jobs. The average academic in the UK earns £48,000 p.a. against the national full-time average of £33,000. Indeed all of the occupations we considered earned more than the average, as one would expect given the educational attainment of the workers. But there is a clear trend over time toward an erosion of the wage premium. A teacher earned 24% more than the average in 1975, but only 6% more in 2013.

2. High-pay jobs

If these high-skill, non-routine occupations have not seen the relative gains we might have expected, the natural question is who have been the winners? A key part of the explanation is that these occupations have failed to keep pace at the top of the distribution. In 1975, teachers had double the probability of an average worker of being in the top 5% of all earners. By 2012, the top 5% of earners (those earning over £68,000) included almost no teachers. This pattern of gradual elimination from the top part of the earnings distribution is true for all the professions shown above.

Thus we have a situation in which these high-skill occupations pay relatively well at the median but not at the top – dragging the mean wage down. In their place, finance workers, management consultants, medical practitioners, IT professionals and the like have accounted for a rising share of the top earners. From a policy perspective we can see that a whole set of professions are likely to find it difficult to retain the very best workers as the wage structure is more compressed in these jobs than for the economy as a whole.



3. Accessing middle class living

Should policymakers worry about the fact that so many high-skill occupations have fared relatively poorly? On one level, the answer is no. These are still very well paid occupations and it is inevitable that some professions do better and some do worse over any period of analysis as supply and demand varies.

On another level however it should at least give us pause for thought. These are all occupations that seem to be the type that policymakers have been encouraging workers to equip themselves to enter. And yet these professions increasingly deny access to the top earnings in the economy.

Perhaps in the end what this tells us is that it is increasingly difficult to enter a profession and be sure that a comfortable and secure middle-class lifestyle will automatically follow. This, of course, has clear ramifications for the high profile policy discussions currently taking place on wages and living standards.

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TECHNOLOGICAL CHANGE AND NEW WORK

Carl Benedikt Frey & Michael Osborne

Long-run economic growth depends on the application of new technologies that reshape production, adding new kinds of work to the economy. As new work is added to the old work, the skills of some workers are inevitably made obsolete. Throughout history, this process of creative destruction has created enormous wealth, but also undesired disruptions. How places adapt and incorporate new technologies into new work can determine the fortunes of entire cities and nations. Managing the transition into new work should therefore be a key priority for policymakers.

1. The Computer Revolution and the middle class

Despite centuries of creative destruction the concern over technological unemployment has not materialised. The obvious reason for this is, as economists have long understood, that labour-saving technologies have effects on all product and factor markets. In short, an increase in the efficiency of production which reduces the price of one good, will increase real income and thus increase demand for other goods.

Technological progress has however vastly shifted the composition of employment, from agriculture and the artisan shop, to manufacturing, to service and management occupations. Doing so, it has benefited workers differentially. While the Industrial Revolution created the middle class, the Computer Revolution – beginning with the first commercial use of computers around 1960 and continued through the development of the World Wide Web and e-commerce in the 1990s – has arguably caused its decline. Computers and industrial robots have substituted for the same type of routine work that was once done by thousands of workers on assembly lines. At the same time, with falling prices of computing, problem-solving skills have become relatively productive, explaining the substantial employment growth in occupations involving cognitive work where skilled labour holds a comparative advantage. Maarten Goos and Alan Manning's work on 'Lousy and Lovely Jobs', thus captures the essence of the current trend towards labour market polarisation, with growing employment in high-income cognitive jobs and low-income manual occupations, accompanied by a hollowing-out of middle-income routine jobs.

Nevertheless, the idea that technological progress favours skilled workers is largely a twentieth century phenomenon. The relationship between technology and the types of new work it has created has thus not been monotonic, meaning that economic history does not necessarily provide any guidance for policymakers seeking to understand how technological progress will reshape labour markets in the future. To understand how technology will alter the demand for skills and the type of new work that will be created, we rather need to look at the tasks computers are and will be able to perform.

2. The onset of the Big Data Revolution

While computerisation historically has been confined to routine tasks involving explicit rule-based activities which can easily be specified in computer code, it is now spreading to domains commonly defined as non-routine. The rapid pace at which tasks that were defined as non-routine only some years ago have now become subject to computerisation is illustrated by seminal work of David Autor, Frank Levy and Richard Murnane asserting that: 'Navigating a car through city traffic or deciphering the scrawled handwriting on a personal check – minor undertakings for most adults – are not routine tasks by our definition.' Today, about ten years later, these problems are sufficiently well understood that many related tasks can be specified in computer code and automated.

Recent technological breakthroughs are largely due to engineering efforts to turn non-routine work into well-defined problems. This is helped by the provision of 'big data'. With the increasing availability of relevant information, computers can now do better benchmarking and pattern recognition than any human worker.

Furthermore, with the improved sensing available to robots, jobs in transportation and logistics are now, for the first time, at risk. Take the autonomous cars being developed by Google. This new technology may lead to workers such as bus and truck drivers being replaced by machines. Workers in administrative support functions are by no means immune either. The ability of computers, equipped with new pattern recognition algorithms, to quickly screen through large piles of documents even substitutes for the work of paralegals and patent lawyers. More surprisingly, our research suggests that many service and sales occupations, where much of the job growth has occurred over the past decades, are also in

the high risk category of automation. As the comparative advantage of labour in tasks involving mobility and dexterity will diminish over time, the pace of labour substitution in service occupations is likely to increase even further – the market for personal and household service robots is already growing by about 20 percent annually.

3. Half of the current jobs in the US could be automated

According to our research roughly half of the current jobs in the US could be automated over the forthcoming decades following these developments. Furthermore, we find that wages and educational attainment exhibit a strong negative relationship with an occupations probability of computerisation. The Big Data Revolution thus marks a potential turning point. While the manufacturing technologies of the Industrial Revolution largely substituted for relatively skilled artisans by simplifying the tasks involved in production, the Computer Revolution has caused a hollowing-out of middle-income jobs over the past decades. Looking forward, the next generation of big data-driven computers will mainly substitute low-income, low-skill workers over the next decades, exacerbating already growing wage inequality. As many of the safe havens for low-skill workers are likely to disappear in the near future, labour markets may face a time of technological turbulence.

4. Managing the transition

So, if a computer can drive better than you, respond to requests as well as you and track down information better than you, what tasks will be left for labour? Our research suggests that human social intelligence and creativity are the domains where labour will still have a comparative advantage. Not least, because these are domains where computers complement our abilities rather than substitute for them. This is because creativity and social intelligence is embedded in human values, meaning that computers would not only have to become better, but also increasingly human, to substitute for labour performing such work.

Our findings thus imply that as technology races ahead, low-skill workers will need to reallocate to tasks that are non-susceptible to computerisation – i.e. tasks requiring creative and social intelligence. For workers to win the race, however, they will have to acquire creative and social skills. Development strategies thus

ought to leverage the complementarity between computer capital and creativity by helping workers transition into new work, involving working with computers in creative and social ways.

Specifically, we recommend investing in transferable computer-related skills that are not particular to specific businesses or industries. Examples of such skills are computer programming and statistical modeling. These skills are used in a wide range of industries and occupations, spanning from the financial sector, to business services and ICT.

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ROBOTS AND PROGRESSIVE POLITICS

Alan Manning

The changes in technology we are seeing mean that we need progressive politics more than ever. It is needed to ensure that technology results in real economic growth and that the benefits of this growth are shared fairly. Since at least the start of the Industrial Revolution, technological change has always changed the demand for different sorts of labour to the advantage of some workers and the disadvantage of others. In recent years the dominant trend has been that of job polarisation or hollowing-out in which there has been rapid growth in the employment share of high-wage occupations, for example managers and professionals, more modest but still positive growth in the employment share of low-wage occupations, for instance shop assistants and care assistants, and falls in the employment share of jobs in the middle of the distribution such as clerical and many manufacturing jobs. The most plausible explanation for these changes is that machines, computers and robots are displacing human labour in jobs where the instructions can be written in computer code.

1. The rise of the robots

Changes to employment structures seem to be occurring in all the advanced economies and – to date – show no sign of stopping. And, with continual improvement in the performance of computers there is no reason to think that it will stop. This has encouraged a vigorous debate on the current and future consequences of these changes – sometimes it seems that the fastest growth in employment has been among those writing about robots. There is an active debate whether we are at the start of a period of unprecedented technical change based on computers extending into many areas (Brynjolfsson and McAfee's book 'The Second Machine Age' being a prime example) or entering a period of stagnation (as Robert Gordon has argued).

And if there is rapid change there is an equally active debate about the consequences. Some extrapolate current trends in job polarisation into the indefinite future and foresee a society in which larger and larger swathes of human labour are replaced by machines and the only human labour required are the services of a small elite who are needed to design these machines (and perhaps eventually even these are unnecessary). In this vision most humans will go the way of horses who were once, literally, the workhorses of the economy but whose costs to rear and feed rose above those of machines that did the same work such that the horses ended up surplus to requirements.

2. Inequality and the space for progressive politics

In all of this discussion the critical role played by inequality is often under-played. Some ask 'what will we do with ourselves when there are no jobs because the machines are so much better and cheaper than people?'. This is a bit like asking 'what do British aristocrats do when all the jobs are done by servants?'. The answer is that they do what they want. But, of course, the gentry have the economic resources to pay servants to do the work so the important question is 'who owns the machines?'. We cannot rely on the economics of the market interacting with technological progress to deliver inclusive growth and a fair distribution of wealth – there is no reason to believe in any automatic mechanism to make sure that it does. Making sure that growth is inclusive is the job of the political process, and of progressive politics in particular as that is motivated primarily by the underlying belief that the distribution of rewards is unfair.

And this is why these changes present opportunities as well as challenges for progressive politics. There are those who argue that progressive politics is doomed because the powerful forces of the market and technology are inevitably leading us to a more unequal society (Tyler Cowen's 'Average Is Over' being a good example). The opposite is the case – we need progressive politics more than ever in such a situation to ensure that the benefits of growth are fairly shared. Building a fairer society may be harder but that simply makes it even more important to try.

3. But what might these progressive policies look like?

We need to do more to remedy inequalities in our education system to ensure that it is a fair opportunity for all and that parental wealth and privilege cannot buy advantage. And we need to make sure that people have the skills to take advantage of change. We will also probably need at some point to take on vested interests e.g. in the professions that have done so well in recent years. Technology may well undermine the mystique of expertise that surrounds so many workers in the professions whether medical, legal, educational and financial. But, even as their positions will be threatened by computerisation, there will be a big fight to protect entrenched privileges and the professions are probably the best-organised workers in today's labour market.

We will need to regulate financial markets to make sure that the earnings of those in that sector really do reflect benefits to the wider society. And I think we will need to do more redistributive taxation; to tax the largest incomes more heavily than we do now. So large has been the increase in the share of income going to the top 1% that taxing them more heavily only takes them back to the level of earnings they had a few short years ago – it is simply not credible that slightly higher taxes will drastically reduce work effort among high-earners.

4. Progressive politics is needed to save capitalism from itself

Technological change – almost by definition – allows us to do everything we could in the past and more, so it should make us better-off. We can use these new-found abilities to harm people (think of ever-more destructive weapons), to engage in metaphorical arms races for control over limited resources (think of the tiny advantage some new trading algorithm might give a trader), or we can use them to make us all better off. We need to make sure the latter is the course

we follow. So those on the progressive side of politics should not be apologetic about their beliefs in a fair society and the policies needed to move us in that direction. If there is no benefit from growth for the median voter then they can hardly be expected to vote for growth-friendly policies and the likelihood is that, eventually, they won't. So progressive politics is needed – as is often said – to save capitalism from itself.

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THE SOCIETAL IMPACT OF TECHNOLOGY

Maarten Goos

In the 1950s and 1960s, vacuum cleaners, washing machines, electric stoves, refrigerators, toasters and kettles revolutionised the household. At that time, bright television and magazine advertisements encouraged women to stay at home and create a domestic haven for their families using the new appliances on offer. However, the societal impact of these new appliances turned out to be very different. They released housewives from the shackles of domestic chores and made women choose to join the paid workforce instead of staying at home, leading to a large demographic dividend to labour markets and economic growth in the 1950s and 1960s.

An important question is whether we can expect an equally large impact on labour markets and society from more recent and future digital innovations driven by, among others, Big Data, the Internet of Things, Robotics, Key Enabling Technologies, and Hyper Connectivity. An equally important question deals with the challenges this new digital age poses for policy makers.

1. It's skills, not technology

One concern that has recently received much attention is the public fear that technology will soon make most of our jobs obsolete. This pessimism already existed during previous episodes of technological change. For example, during

the Industrial Revolution, the Luddites violently protested against the use of labour-saving machinery in English textiles. Today, especially innovations in Machine Learning (e.g. IBM's Watson successfully competed with humans in the television game show Jeopardy!) and Mobile Robotics (e.g. Google's driverless car) have reinvigorated fears that technology is becoming more efficient than humans in doing many tasks.

However, disappointing job growth in the future is more likely to result from a lack of worker skills than from too much and rapid technological progress. Whereas new technologies abound, the bottleneck in today's labour market is a lack of worker specialisation to complement those technologies. For example, one in three adults regrets their choice of study in part because of poor job prospects after schooling. On-the-job training, experience in high performance work practices (e.g. working in problem solving teams, job rotation, information sharing) and lifelong learning complement today's technologies but are not yet commonplace.

Finally, skill-upgrading should not be restricted to high-paid jobs but also include the development of human talents relative to technology even for less-educated workers. For example, serving tables in a restaurant does not require much education. But a good waiter ensures that customers can enjoy their meal, which is a task that computer programmers still find impossible to express in matrix algebra.

2. Curing Baumol's cost disease

New technologies cannot be implemented equally across sectors. For example, robots are increasingly used in car manufacturing but not in providing education. Similarly, not all regions in Europe are equally innovative. Bridging these sectoral and regional divides is an important second challenge for policymakers.

If wage growth is more compressed than labour productivity growth across sectors, technological progress leads to different unit labour costs (the ratio of the wage over labour productivity) between sectors and 'Baumol's cost disease' for sectors that can innovate the least. Combined with their increasing employment shares due to job polarisation, this loss in competitiveness for the least innovative sectors implies a drag on economy-wide labour productivity growth. Rather than

decreasing the (minimum) wage in the least-innovative and therefore least-paid sectors to restore their competitiveness, policies should aim for increasing their labour productivity instead. This could be done by developing their technological potential or by allowing faster wage growth in more innovative sectors.

Some regions in Europe employ many high-tech workers and are characterised by strong local job multipliers (capturing that high-tech employment also creates other jobs in that region). However, there are also many regions (particularly in Portugal, Spain, South-Italy and Greece) with very limited high-tech employment. Moreover, there is very little 'catching-up' by these less innovative regions relative to the more traditional high-tech hubs. An important policy challenge to improve the competitiveness of less innovative regions therefore is to stimulate high-tech employment there and to coordinate wage policies across Europe that allow for stronger wage growth in high-tech hubs.

3. Tackling rising inequality

Policies should care about the efficiency of outcomes from decisions made by workers, firms and households following recent technological progress. For example, governments can use online platforms to better match jobseekers to vacancies; can stimulate high-tech employment by helping firms implement new technologies; or can create public support for the acceptance of new technologies.

Besides improving efficiency, policies should also safeguard equity and equality of opportunity in society. Although there is only limited scientific evidence yet on the precise relationship between income (both from wages as well as capital) inequality and ongoing technological progress, there is a consensus among academics that top-income inequality is rising in most advanced economies. The coordinated taxation of capital income could tackle rising top-income inequality and end competition between governments to attract capital in a race to become a capital tax haven.

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EMBRACING LOW-END SERVICE JOBS

Lane Kenworthy

Manufacturing's share of employment has been shrinking steadily for a generation or longer in every rich nation. The causes – lower costs abroad and rising productivity – won't subside any time soon. And while robots and 3D printers may enable continued production of manufactured goods in affluent countries, they won't alter the downward trend in manufacturing *employment*. In most of these countries, manufacturing will account for fewer than 10% of jobs within a few decades. Nearly all jobs will be in services. What kind of services? How can policy help?

1. Educate

We want as many people as possible to work in high-end services. Education is the best facilitator. The better we do at developing cognitive skills and productive non-cognitive traits in all children, and the more opportunity we provide for learning throughout the life course, the larger the share of adults we will have in service jobs that pay well and offer substantial autonomy. Since education has additional benefits – faster economic growth, better health, greater political participation, and more – it's perhaps the most important policy for governments to get right.

2. Embrace low-end service employment

Even if we do a superb job with schooling, high-end services won't employ everyone. Imagine a high-skill, high-employment economy of the future with 85% of the working-age population in paid work. Suppose 65% complete university and end up in high-end service jobs. That optimistic scenario still leaves 20% in other jobs. Some will work in manufacturing or farming, but what of the rest?

They could work in low-end services. However, some favour minimising such jobs. One way to do that is to set the wage floor at a very high level, perhaps supplemented by heavy payroll taxes, in order to reduce employer demand for low-end positions. Another possibility is to offer an unconditional basic income grant at a level generous enough to reduce the supply of people willing to work in a low-paying job.

I don't think that's the best way to proceed. As we get richer, most of us are willing to outsource more tasks that we don't have time or expertise or desire to do

ourselves – changing the oil in the car, mowing the lawn, cleaning, cooking, caring for children and other family members, advising, educating, organising, managing, transporting. And improved productivity and lower costs abroad will reduce the price we pay for food, manufactured goods, and some services, leaving us with more disposable income. So we'll want more people teaching pre-school children, helping others find their way in the labour market or through a midlife career transition, caring for the elderly, and so on, and we will be better able to purchase such services. If there is demand for these services and a supply of people willing to perform them, why discourage them?

These types of jobs can be especially valuable for the young and immigrants, two groups who tend to struggle in the labour market. Some low-end service jobs will be in the public sector, but not all. To facilitate low-end service employment in the private sector, we need a modest wage floor, modest payroll taxes, and social programmes that encourage and support employment.

3. Supplement low wages with an employment-conditional earnings subsidy

If a low-end service job pays a relatively low wage that need not mean a person's income also is low. A subsidy such as America's Earned Income Tax Credit (EITC) or the UK's Universal Credit (formerly Working Tax Credit) can boost household incomes while simultaneously encouraging employment.

4. Enable mobility out of low-end jobs

For some, a low-end service job might be a career. Others will want it to be merely a stepping-stone. Government can help ensure that they have the capability to move up, via healthcare, early education, elementary and secondary schooling, lifelong learning opportunities, retraining, job placement assistance, special services for the mentally or physically disabled, language assistance for immigrants, targeted programmes for the young and the elderly, assistance with transportation, and help in organising formal job ladders.

5. Separate non-wage benefits from the job

Eligibility for pensions, unemployment insurance, sickness insurance, parental leave, holidays, and other non-wage benefits ought be contingent on employment, but not on the particular job or employer you have.

6. Improve quality of work life

Low-end service jobs may offer limited mental stimulation or opportunity to participate in decision making, and some are stressful. There is a limit to the amount of stimulation that some of these jobs will ever be able to provide, but most could do better, and we should try to figure out how and push firms in that direction. Indeed, we should aim to improve working conditions in all jobs, rather than assuming that higher-skilled, better-paying positions automatically have decent work quality. I like the idea of an auditing procedure whereby government sets outcome standards for work conditions, leaves it up to firms to decide how to meet the standards, and monitors their efforts to do so.

7. Tackle social segregation and inequality of respect

We want a society that is modestly rather than severely unequal. Jobs inevitably come with inequalities of status. If they also have profoundly unequal pay, this can easily spill over into social segregation and inequality of respect. Policy should push against this. Neighbourhoods should be designed or redesigned to encourage class mixing. Parks, beaches, libraries, and public transport ought to be attractive to all. And we might do well to consider a mandatory year of national service to ensure that everyone gets an experience of genuine social mixing as they embark on adulthood.

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THE FUTURE OF MANUFACTURING

Julie Madigan

For manufacturing in the 21st Century there are significant changes in both the global economy and the technological landscape that will dramatically shape the near future. A movement towards boutique local manufacturing is already underway, its emergence accelerated by a number of key trends that are now converging.

1. Patterns of consumption and employment are changing

The global economic trends that are reflected in the ongoing banking crisis, the scale of sovereign debt, an ageing population of baby boomers, the cost of healthcare and the implications of high levels of long term unemployment – especially for the youth in many of the developed nations. These dynamics are creating a set of serious questions on the current models of consumption and employment and this will impact those who manufacture goods and deliver services.

2. Resource scarcity and concerns around environmental sustainability

Increasing input and landing costs have significant implications for today's complex, and often lengthy, global supply chains putting pressure on resources. There is also mounting concerns around environmental sustainability. Here, the 'Circular Economy' model offers an alternative value proposition by re-aligning today's business models from current linear economic thinking around mass production, throughput and efficiency, to one where raw material conversion, creative product designs and manufacturing and full lifecycle management are fully optimised.

3. The 'democratisation' of design and manufacturing

Open innovation trends fuelled by open source design and software coupled with cost reductions in machinery and the emergence of global networks sharing know-how and innovation capability will lower the barriers to entry to manufacturing. It is this that is being referred to as the next industrial revolution. A new multi-local digital maker culture is the forerunner of this and is already underway.

4. The digital revolution continues apace

This is reflected in the products and services that continue to appear in our everyday lives. This digitally enabled environment will continue to progress under the headings of internet based services, smarter, cheaper devices and applications through to the growing impact of Artificial Intelligence and robotics. The next phases of growth in the digital arena will have far reaching effects on the white collar, professionally based service industries within the next few decades.

We can also now see the growth of the digital revolution into processes that connect the virtual to the physical world. Typically these have evolved in the last two decades from stand alone developments in computer aided design ('CAD')

to machine controlled code for manufacture – computer aided manufacture ('CAM'). These have been applied to subtractive manufacturing processes through numerically controlled machining and, more recently, additive layer manufacturing. These technologies are now being simplified, with closer integration with resulting lower costs and ease of use. Machines are now being developed with the capability to manufacture on location through to factories on the desk for the consumer and smaller enterprises. Computer simulation, coupled with 3D technology, is also enabling researchers to bio-mimic material structural applications evolved by nature over billions of years.

5. With digital fabrication a new branch of industrial design is emerging

By resolving the issue of how complex configurations can be made from simple repeatable structures that can be joined or un-joined innovative structural architectures (such as those geodetic structures engineered by Barnes Wallis seventy years ago) can be digitally enabled in a more efficient and cost effective manner. And soon, the game changer of digital materials will arrive- materials that can configure themselves into specified 3D shapes in much the same way as a string of amino acids can create a complex and highly specific protein structure in nature.

6. The rise of a new generation of local manufacturers

The changes outlined will result in a new generation of local manufacturers. Many of these will be new entrants to manufacturing. The vision is one of a highly innovative, dynamic and granular manufacturing economy in addition to the traditional scale manufacturing economy we see today. This model should fit well with the innate cultures and infrastructures of developed economies. These trends raise many challenges for governments, however, and require a new agenda:

7. A government agenda to support boutique manufacturing

Skills: At a UK level, the need for an economy more balanced towards manufactured goods is well documented. A recent UK Government Foresight Report reported a need for a further 800,000 people to enter the manufacturing sector to simply maintain the current contribution of manufacturing to GDP to 2020. The apparent skills shortage and lack of entrants to the manufacturing sector is happening at a time when the sector is due to boom.

Finance: There is still a risk aversion from investors to manufacturing and hardware companies as higher levels of capital investment are required together with knowledge of manufacturing processes to succeed. The ability of existing manufacturers to act quickly is therefore constrained. We need new institutions, vehicles and processes based on a stronger understanding of these technologies and the commercial opportunities they represent.

Capital investment: The gap in technical knowledge and insight combined with the aversion to longer term investment in both new hardware businesses and capital equipment constitutes a threat to the ability to exploit this new arena. It is particularly important that smaller and medium sized manufacturing companies are supported here. Whilst many of these have the agility and critical mass to embrace these new areas as documented by recent research, the ability to invest in technology that is not market-ready but just over the horizon is very limited for many smaller firms. In this fast moving space technology know-how will be at a premium.

Applied research will be and is critical as is access to new machinery in flexible new models, not in traditional institutions.

Agile government and adaptable policy: As this market place develops apace it is characterised already by speed. We have seen millionaires created in less than six months using community digital fabrication laboratories in the UK. The idea, prototype and funds can be achieved quickly. If economies are to capitalise on the innate innovative potential of their populations then local manufacturers need to be created alongside. As this movement is very much multi-local a more grass roots, scientific and experimental approach to intervention and policy development is needed.

Julie Madigan is CEO of the Manufacturing Institute, the UK's longest established charity focused on the manufacturing sector and its development

SIX JOB CREATION FALLACIES

Frans Bieckmann

The objective of full employment should be central to any general policy, be it national macroeconomic or financial policies, multilateral policies, or development policies. Currently, the aim of ensuring enough decent jobs is a side show. GDP growth is seen as the sole goal which should be served by labour, instead of vice versa: the growth of the economy serving the wellbeing of the people who contribute to it through their work.

Economic and political discussions merely pay lip service to employment. If you scratch below the surface, you will see a lack of ideas about how GDP growth would create more decent jobs. Current economic and political leaders in Europe and beyond argue, in short, that unemployment is a temporary problem caused by the economic crisis of 2007/2008. In their view, after a few initial years of stabilisation, GDP growth will recover. Further, liberalising European and world trade and making labour markets more flexible will cause GDP to rise, automatically (sic) leading to more work. On the 'supply side' of labour, employability, training to bridge the skills gap, and 'activation' will make more workers fit for jobs, while wages have to be kept low to allow employers to compete with emerging economies.

1. The old job recipes don't tend to work

There are six job creation fallacies. Firstly, it is argued that GDP growth automatically leads to more jobs. Like income, jobs are supposed to 'trickle down'. However, increasing income inequality and 'jobless growth' show that the opposite is occurring. Secondly, it is said that more free trade and international competition lead to more jobs. But job destruction is increasingly outweighing job creation, and newly-created substitutive employment is usually rewarded today with lower wages. Thirdly, it is said that higher profits lead to more jobs. In reality, financial globalisation has, in many cases, led to the diversion of profits and shareholder revenues into speculative financial products and other non-productive activities. Fourthly, we are told that lower wages will lead to more employment. But in many European countries, real wages have, however, not grown significantly since the 1990s, while GDP has, but without resulting in more jobs. Fifthly, it has been argued that increasing labour productivity will lead to more employment, via the higher growth that this generates

through greater competitive power. However, productivity in the Netherlands, for example, is already one of the highest in the world, and indeed it has actually doubled in many countries in the past decade. But this has not led to more work, or to higher wages. And sixthly, we are told that technological innovation creates more jobs. There are many signs to the contrary, as machines or robots might take over a lot of work. An additional problem is that technological and logistical change is moving so rapidly that skills are running behind structurally.

2. Reactionary policies are part of the problem

Another fundamental problem with current employment policies is that they are reactive. They take external factors – like economic globalisation and the financial system – for granted. They see monetary stability (limited inflation) as core to financial and economic policies and see liberalisation and flexibility of the economy as key. The only way social democrats differed from their political opponents in the 1990s and 2000s is that they were willing to compensate the losers and those excluded from this economic model a little bit more.

3. Time to prevent rather than compensate

The alternative should be more than mere redistribution of profits generated through further liberalisation of the European or global economy. While redistributive measures like cash transfers and other forms of social protection are necessary, especially in times of crisis, they do not really alter the structural circumstances in which these socio-economic problems originate. Therefore more transformative policies should be pursued by a new left to prevent rather than compensate unemployment or inequality.

4. Transformative ‘predistribution’

A set of transformative policies should at least structurally embed full employment, decent work, and less wage and wealth inequality in the design of economic policies and in the regulation of markets, instead of focusing only on GDP growth and compensating the losers.

The wealth that is accumulated should be invested less in financial products that fuel bubbles, and at least partly diverted towards investments in the real economy. This could be achieved either by stimulating direct productive investments or

by taxing extreme wealth. Of course, this implies stronger control of tax flight and global financial flows. These tax revenues can then be used for job creation through incentives for innovation in for example alternative energy sources and natural resources, or by giving preference to SME investments.

They should also embed and correct free trade with a bias towards the protection and creation of jobs. This includes transforming the race to the bottom, based on wage competition, into competition on, for example, innovation of energy sources and natural resources. Norms need to be established and stimuli provided to redirect research and development from a focus on pushing back labour costs via automation towards labour intensive innovations that push back energy and environmental costs.

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AVOIDING A PROLONGED PERIOD OF JOBLESS GROWTH

Paul de Beer

Before the onset of the economic crisis, a shortage of workers was expected to be the main problem of future labour markets. Many scholars emphasised the long-term consequences of demographic change, in particular ageing and the transition from a growing to a shrinking labour force. On the one hand, these analyses seemed to offer a favourable prospect for workers, since an excess labour demand was expected to strengthen the bargaining position of workers. Moreover, it would considerably improve the prospects of the long-term unemployed and other job-seekers. On the other hand, possible adverse societal consequences such as a lack of qualified workers and the tilting of the balance between the active labour force and the dependent retired population were seen as threatening growth and the sustainability of the welfare state. Moreover, the position of the low-skilled might not improve if there was a qualitative mismatch between labour supply and demand. Thus, increasing the labour supply was seen as the overarching priority, inter alia by raising the retirement age, and by improving the qualifications of the low-skilled through extended education and training.

However, as the financial and economic crisis set in and unemployment rates reached record highs, the consequences of an ageing and shrinking population were replaced by growing worries about the current lack of jobs. The effects of the crisis on labour demand exceed the effects of demographic change on labour supply by far. Recent concerns have risen that the shortage of labour demand may not dwindle as the economy recovers, as we may be facing a prolonged period of jobless growth. Various experts suggest that rapid technological progress will result in a massive substitution of human labour by robots and computers. This analysis has reawakened old debates about shorter working hours, in order to share the available work among more people, or the provision of a guaranteed unconditional basic income to all citizens.

1. High unemployment is the main problem of the next few years

These contradictory analyses of labour market developments are both one-sided, since they focus only either on the supply or on the demand side. In the long run, supply and demand can be expected to adjust to each other. There is no reason to expect that the trends of supply and demand will diverge indefinitely and that the lack of jobs or workers will keep on growing. However, the labour market is far from a perfect market which quickly tends to equilibrium. In the short and medium term, it is often characterised by serious imbalances, resulting in a high unemployment rate or a high vacancy rate. There is no doubt that in the foreseeable future – say, in the next five years or so – high unemployment will be the main problem.

2. Waiting for the recovery to create jobs is not enough

It is rather worrying that hardly any new measures to fight unemployment have been introduced since the onset of the economic crisis. As the financial and economic crisis turned into a fiscal crisis, most EU governments shifted their focus from expansionary to austerity policies. They hope that employment will pick up automatically as the economy recovers. Although this may be true, it is a risky strategy. First, a modest GDP growth rate of 1.5 (as expected for the EU in 2014) to 2 per cent (in 2015) will hardly create additional jobs, since labour productivity is likely to rise by almost the same percentage. This is not due to the massive introduction of robots, but simply to the fact that labour productivity has lagged behind during the crisis as a consequence of labour hoarding. As a consequence, the number of jobs will only start growing substantially in a few years time as economic growth continues. Secondly,

unemployed people who have stayed out of work for a prolonged period of time may not succeed in finding a job once employment starts to increase. This may cause a so-called hysteresis effect, whereby a high unemployment rate continues over time even if labour demand rises again. As a consequence, the number of unfilled vacancies may rise while the unemployment rate stays at a very high level.

3. Shift priority from fiscal consolidation to employment

It is therefore both in the interest of the vast number of currently unemployed and in the interest of sustaining economic growth that government policies tackle the short term unemployment problem instead of waiting for an automatic fall of unemployment as the economic recovery accelerates. As long as governments – and the EU – prioritise reducing public deficits over boosting employment, it will be difficult to devise measures that will contribute to reducing unemployment in the short run. Nevertheless, several measures might be considered for which no or only little extra government funding is needed.

4. Develop worksharing

One option is to stimulate temporary worksharing schemes. If a company faces redundancies, a temporary reduction of working time to prevent forced layoffs might reduce the number of unemployment benefit claims. Hence, the government could support worksharing, for example by tax deductions, without increasing the budget deficit.

5. Shift the tax burden on jobs and incomes

A second option is to shift taxation from labour to polluting activities or to the use of fossil fuels, which would boost employment and at the same time support sustainable economic development. Thirdly, a more progressive payroll or income tax may enhance employment opportunities for the low skilled, as it would shift the balance of taxation from low paid to high paid jobs. Moreover, it would help in narrowing the steadily increasing income gap between the rich and the poor.

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FIGHTING NEW INTERGENERATIONAL AND SKILL INEQUALITIES

Bruno Palier

Many European countries are on the edge of an intergenerational conflict which could hit home forcefully in the coming years. The political residue of fiscal contraction has sparked-off a situation in which pensioners seem not to want to make collective sacrifices to their living standards while younger people are increasingly frustrated with the opportunities afforded to them by their government and political class. At the heart of the divide lies the fact that public spending on healthcare and pensions, which primarily benefit the elderly, is disproportionately higher than spending on childcare, education and training, which by nature are geared more towards younger generations. As the OECD points out, the risk of poverty for older people has fallen, while poverty among young adults and families with children has risen.

Investing now in children and younger generations would have a triple benefit for society:

1. Reaching those who need most social support

During the last two decades, poverty has shifted from the elderly to the younger generation. Yet, despite these changes in the distribution of poverty and life chances, the redistributive structure of our welfare states has not changed. Worse, it has increasingly concentrated its expenditure on the elderly.

This of course reflects demographic changes in our societies, characterised by the fact that people are living longer (hence benefiting from longer pension periods), more people are retiring (the baby boom has turned into a papy boom, and the papy boomers have been lucky enough to have lived and worked during a period of exceptional growth with almost no unemployment, thus having a full career entitling them to expensive pensions), while fertility has gone down leading to a shrinking active population, and thus the tax base is smaller. Spending may be driven by demography, but it does not have an answer to a new set of corrosive social problems.

Should we just let things go, and see expenditure driven by demography and not political choices or social justice? Should we do nothing collectively for the younger generation? This is a crucial political dilemma for European social democratic parties. Those who could contribute more to the welfare state (the baby boomers) are more likely to vote. They have the feeling that they deserve their social benefits (they indeed worked and paid for it) and do not feel selfish since most of them take care of their own children and grandchildren (and sometimes also of their frail parents). But should one leave redistribution to be organised within families, thus letting rich grandparents enormously help their grandchildren, leaving poorer, less-equipped elderly people to do very little for their children and grandchildren, hence reproducing social inequalities through intergenerational intra-family transfers?

2. Preparing the future tax base

Social policies for the young are not 'passive' income support but investment in human capital. Delivery of emancipating and 'capacitating' services such as child care, education and training represent a way to prepare the new generation for the new economic conditions. Indeed, providing all children and young people with much-needed qualifications is also an employment policy at a time when qualifications are required to succeed in knowledge-based economies.

In today's economy, qualifications are more important than ever. In this context, the lack of adequate qualifications has become a new social risk. Indeed, unemployment rates are much higher for the unskilled than they were a couple decades ago, and much higher than for those with tertiary education. As the European Commission's 'New skills for new jobs' report underlines, the employment rates across Europe as a whole in 2008 for those with high skills was 83.9%, that for medium skill levels was 70.6%, but that for low skill levels was only 48.1%. Not only this, but the wages of the low-skilled have also fallen relative to the more skilled despite falling numbers of low-skilled individuals in the labour force, suggesting that there has been a fall in the demand for low-skilled labour.

While specific policies are needed to support the least skilled, social investment strategies cannot be based exclusively on programmes targeted at 'the unskilled' or other disadvantaged groups, but should be based in the first place on the provision of universal, quality education and training programmes throughout

the life-course. Equality and quality must be at the centre of the social investment approach in order for the programs to deliver good returns.

At stake here is both equality of access (to childcare, education, life-long training, and healthcare services) and income equality. As the Scandinavian countries illustrate, egalitarian societies perform better. They are more successful at implementing social investment policies and at achieving many of the desired outcomes linked to this strategy.

'Quality' should be another crucial component of a social investment strategy. This relates both to the quality of jobs but also to the quality of services. Only high quality childcare can foster good cognitive skill acquisition amongst all children and help reduce social inequalities. Participation in a course of education does not directly translate into high achievement: the quality of education matters more than simple participation for skill accumulation, particularly at the low end of the capability distribution.

3. A new electorate for social democracy

Renewing their vision of the welfare state towards a more future-oriented social investment strategy that is willing to invest in children and youth could reconcile the new generations with social democratic parties and governments if they are able to propose and develop these policies. The reality is that current young electorates are not at all seduced by current centre left parties. Social democrats should not risk becoming the party of the baby boomers, defending only those who benefit from the best social democratic invention so far (the post-war Keynesian welfare state), without reaching out to new constituencies who are enduring new difficulties on the labour market.

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WOMEN AND LABOUR MARKET RISK

Silja Häusermann

The processes of deindustrialisation, tertiarisation and labour market deregulation have led to a massive increase in the share of atypical employment – notably temporary and involuntary part-time employment – and unemployment in all countries of Western Europe. It is widely agreed that people affected by these forms of labour market vulnerability (so-called ‘labour market outsiders’) benefit most from specific, post-industrial forms of social policy, oriented towards flexicurity, social investment and enabling activation. However, it is still debated to what extent such investment-oriented policies should be a priority in the progressive social policy agenda, as compared to a focus on traditional, insurance-based income protection policies.

Indeed, since women are particularly affected by atypical employment, it has long been assumed that traditional household patterns mitigate the need for such specific outsider-policies. In other words: it was assumed that if female labour market outsiders cohabit with more secure labour market insiders, women would be at least partly shielded from material outsider risks through a ‘household safety net’ provided by their partners.

However, such a view is increasingly erroneous. Only a small minority of women can be seen as shielded from labour market risk through their partner. Therefore addressing the specific social policy needs of, in particular, female labour market outsiders should be a priority for progressive politics in Europe.

1. Addressing women’s labour market vulnerability

Non-standard forms of employment have spread massively across the societies of Western Europe in the past decades. Temporary employment is the most widespread form of atypical employment and accounts for almost 15 per cent of all jobs across Europe in 2012 (with top levels above 40 per cent in Southern Europe), followed by unemployment (close to 10 per cent) and involuntary part-time employment (about 5-10 per cent on average across Europe). In times of economic stability, the higher level of labour market vulnerability that these contracts entail remains largely obfuscated. But in a context of crisis or recession,

people with such contracts are the first to drop out. This is why labour market dualisation has contributed to the trend of rising inequality that we have been witnessing throughout Europe over the past two decades.

Moreover, once these labour market outsiders need to rely on welfare benefits, they may even be entitled to significantly lower social rights than the insiders, because the traditional welfare states, especially in continental and Southern Europe, rely on social insurance as a mechanism of income protection. Social insurance, however, requires continuous and regular contribution records, which is precisely what the labour market outsiders lack. Therefore traditional social policy instruments often fail to address the specific welfare needs of labour market outsiders effectively. The welfare state that people in vulnerable employment contracts need looks quite different from the traditional male breadwinner welfare state: such a post-industrial welfare state entails a basic layer of universal and redistributive income security, preferably financed through (progressive) income taxes rather than payroll contributions. And most importantly, it entails policies that ensure that flexible employment is not precarious employment. This implies 'flexicurity', i.e. social security for flexible jobs, social investment and enabling activation through access to education and vocational training, active labour market policies and affordable, good quality childcare services.

2. Recognising that most labour market outsiders are women

Labour market vulnerability is very unequally distributed between men and women, age groups and across particular occupations. Universally, women are more often in unemployment and atypical employment than men, the young more often than older employees, and flexible, atypical employment is more widespread in the service sector, both low- and high-skilled.

Since female labour market participation is higher in the younger cohorts, women are more likely to work in the service sector than men, and women are generally more affected by career interruptions due to non-paid childcare work, gender has become the key factor structuring the distribution of labour market vulnerability in Europe. Far more than half of the women working in medium- and low-skilled service sector jobs across Europe, for instance, are in atypical employment, while this is the case for only 25-30 per cent of the (much fewer) men in these same

jobs. Even in the skilled and high-skilled service sector occupations, about half of the female employees hold non-standard jobs or experience unemployment. A social policy strategy addressing the needs and demands of labour market outsiders therefore cannot be gender-blind.

3. No more safe havens: the demise of the male breadwinner household

The fact that labour market vulnerability affects women particularly strongly has often been seen as a reason why the concrete material disadvantages outsiders are exposed to might be mitigated through the household. If female outsiders form a household with male insiders, even traditional social insurance income protection would contribute to the welfare and material security of outsiders. Moreover, it was assumed that in such a mixed household, even the social policy preferences, i.e. the type of policies individuals support and demand, would align on traditional income protection policies. This would imply a certain demobilisation of outsider needs, meaning that political parties would have little electoral interest in addressing such needs specifically.

However, such a view of the household as a 'safety net' for female outsiders is increasingly erroneous for a number of reasons. First, most female outsiders cannot and do not rely on a secure male breadwinner. While it is indeed true that women cohabiting with partners in very privileged professions do not show a preference for outsider-oriented social policy, the vast majority of women show clear preferences for outsider policies, even if their partners are in standard employment.

The share of women in vulnerable labour market situations whose preferences are aligned with their insider partners ranges from less than 10 per cent in Scandinavia and Southern Europe to about 25 per cent in continental Europe. These low numbers may also reflect the overall high levels of household instability in Europe. Moreover, with increasing socio-structural homogeneity, ever fewer women live in households with a secure partner. While in the US, recent numbers showed that women are the main breadwinners in almost 40 per cent of the households, this number is still below 20 per cent in Europe. However, it has increased substantially over the past ten years, especially in Southern Europe. With men being increasingly affected by labour market vulnerability as well, the

needs and preferences of outsiders thereby gain increasing material and political saliency. Therefore, addressing the specific social policy needs of – still mostly female – labour market outsiders should be a priority for progressive politics in Europe.

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INVESTING IN FEMALE LABOUR

Moira Nelson

High employment is the linchpin to both future economic competitiveness and the sustainability of existing social policy commitments. Yet the misconception that social benefits always dampen work incentives undermines efforts to boost employment. Future employment growth must consist largely of women and securing their participation in the labour market calls for social investment policies. Daycare, sickness insurance, unemployment insurance, and medium-term leave schemes are all social investment policies that help workers, and often mothers in particular, maintain a connection to the labour market over the long-term, despite sometimes enabling labour market absence in the short-term.

1. Economic competitiveness depends on a growing female workforce

Future employment growth comes largely from placing women in jobs who are currently seeking employment and encouraging a largely untapped pool of female labour to enter the labour force. Ignoring the obstacles to female employment holds enormous economic costs.

2. Enabling workers to be carers is a good long-term growth strategy

Public policy can play an important role in enabling workers to care for small children and ageing parents. All workers should be allotted time to care for their families while retaining an attachment to the labour market. If public policies exist that provide care services outside the home or allow workers

to take periods of time off from work to care for family, people are not forced to choose between participating in the workforce and taking care of dependents. Sharp trade-offs, on the other hand, are unproductive, because workers either neglect their family or leave the labour market altogether to assume care responsibilities and thereby no longer contribute to the economic wealth of the country. Allowing workers to be carers, too, therefore represents a strategy that builds strong families – the building block of a healthy, cohesive society – and boosts economic competitiveness by leading to higher levels of employment.

3. Focus on high quality, affordable daycare

If daycare is not accessible or costs too much, one parent, typically the mother, will not return to work after having a child. Making daycare services widely available and affordable ensures that participating in the labour force remains a viable option for parents, especially mothers.

Participation in daycare also stands to boost the cognitive skills of young children. Although many people continue to question the superiority of daycare services to parental (usually maternal care), the benefits of daycare should not be overlooked. Not least, many families face economic pressure for both parents to earn a wage. Without daycare, parents are left struggling to find shifts that allow them to share care responsibilities or make do with only one income and therefore face a heightened risk of falling into poverty.

As a final caveat, children will only gain cognitive skills if daycare is of high quality. Providing quality daycare means making sure that daycare centres are fully staffed by well-trained caregivers.

4. Generous but not too lengthy leave schemes invest in families without impeding mothers' employment

While the provision of daycare means that care needs are outsourced, there are also periods of time when it makes sense for parents to take time off work and provide care themselves. In the case of very young babies or sick relatives, flexible leave schemes offer the possibility that workers can give much needed attention to family members.

At the same time, the length of the leave scheme is a point of concern. If people remain out of the labour force too long, their skills become less up-to-date and are potentially forgotten due to lack of use. Also, employers often view those who have been outside the workforce for a long time as less competent. For these reasons, the length of leave schemes should not be too long. There is general consensus that parental leave of 1 year is optimal, but that longer leaves of, say 3 years, makes it harder to re-enter the workforce, particularly for low-skilled women.

5. Protect skill investments through social insurance

Educational attainment among women has risen steadily over the past few decades, leading to an increasingly well trained female labour supply. Yet workers, including working mothers, are likely to face career interruptions. Without income support, women facing such risks as unemployment or sickness will be forced to accept new forms of employment that do not reflect their skill level or area of expertise. Insurance schemes, such as unemployment or sickness insurance, protect women's skill investments by allowing them to conduct a proper job search when unemployed or recovering fully from an illness, respectively.

As with the leave schemes discussed above, the length of the benefit matters. The longer workers are out of the labour market, the higher the risk of them losing their skills or facing stigmatisation from potential employers. An obvious exception should be made for illnesses requiring longer-term care.

6. Electoral opportunities lie in addressing work-life reconciliation needs

Addressing work-life reconciliation pays off at election time. With working women making up a larger and larger proportion of the electorate, they and other like-minded voters stand to reward governments that address tensions in balancing work and family needs. The positive economic effects on the labour supply only increase the potential popularity of these policies.

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THE MOTHERHOOD PENALTY

Dalia Ben-Galim

Despite women's increased employment rates, rising levels of educational attainment, and high rates of breadwinning, gender inequality is still pervasive. There is virtually no gender pay gap until the point at which women become mothers. But then a motherhood penalty takes hold where many women find themselves on a downward career trajectory often characterised by low-paid jobs with few opportunities for progression.

Universal and affordable childcare, parental leave policies and flexible work opportunities are essential to not only protect families from poverty, but to support higher employment rates and the future sustainability of social policies.

1. Moving from 'missing from work' to full employment

Female employment rates have steadily risen over the past few decades, but in too many countries there is a gap between the female employment rate and the maternal employment rate. Many mothers are 'missing from work'. The same could be said for women who are caring for elderly relatives and/or spouses. Moving towards full employment requires lifting the employment rates of particular groups that include mothers and carers. Ignoring the reasons why these employment rates are comparatively low carries economic consequences.

2. Enabling choices to work and care will support growth

Social policy plays an important role enabling workers to balance work and care responsibilities. For example, childcare often supports women to (re)enter work, and parental leave policies contribute to women staying in work. Too often parents – and especially mothers – are forced to make a decision between work and care. This can have a negative impact on individuals, families, and society where people are constrained by binary choices. But of course, it's not simply the role of social policy, employers have a role to play in providing employees at all levels adaptability rather than rigid flexibility that has been too common. These policies can not only support many women with caring responsibilities to remain in work, contributing to higher rates of employment; but can provide men with opportunities to work more flexibility tackling gender inequalities and cultural stereotypes.

3. High-quality affordable childcare is essential to boost the maternal employment rate

An early years system that is universal, high-quality and affordable boosts maternal employment rates. High-quality provision can also better support living standards, offer children a positive start in their education, tackle child poverty and promote gender equality. Too many mothers' choices to work are constrained by the high costs and variable quality of childcare provision. This leaves many families struggling to make ends meet. Higher maternal employment rates can also generate a financial return through additional tax revenue and benefit savings that could be invested to ensure high quality provision.

4. Parental leave schemes that invest in family time mitigate 'motherhood pay penalty'

Progressive parental leave for the first year in a child's life can address a number of objectives, on attachment and bonding, on retaining mothers' link to the labour market, on enabling fathers to spend more time with their children, and challenging the gendered assumptions of work and care.

The duration and pay of leave policies matter. For example, if maternity leave is too long or not paid at a reasonable rate, it tends to lock women out of work for longer periods making it more difficult for them to (re)enter work, and lock fathers out of caring.

There is growing consensus that the optimal composition of parental leave should include a defined period of maternity leave to protect the health of mother and baby, a 'use it or lose it' paternity leave for fathers and then paid parental leave for parents to decide how to use. The 'use it or lose it' daddy quota has been effective at encouraging fathers to take a period of leave, but also in weakening the motherhood pay penalty.

5. Flexible work can work for employers and employees

Employment rates for women over 50 have rapidly increased, but remain below men's employment rates. Flexible working and leave policies provide critical support to those balancing work and care responsibilities. They also provide opportunities for people to extend their working lives, which is increasingly

important as the state pension age rises. Many of these women are also part of the 'sandwich generation' often caring across generations for their parents and children or grandchildren. Many older women provide vital support to families which often enables other family members to (re-)enter the workforce. The contribution that older women make to their families and to the economy needs to be more widely recognised. Leave schemes, ways to smooth income over periods out of work and support for grandparents who look after their grandchildren are all part of social policy provision fitting for current demographic and social trends.

6. Childcare and caring through life are political

No longer is childcare defined to the private sphere. It is clear that understanding care needs and the ability for families – especially women – to balance work and care is political. Recognition that these policies contribute to higher employment rates are likely to prove popular electorally.

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PREPARING YOUNG PEOPLE FOR A CHANGING LABOUR MARKET

Alan Brown

Individuals are increasingly changing jobs more often during their working lives. Concerns about the most effective way that initial education and training can prepare people for work sometimes leads to a narrow focus upon immediate 'employability' – the skills necessary to get a (first) job. The major problem with this approach is that whether someone is able to get a job or not depends on the state of the labour market as well as their skills profile. So we need to move beyond only talking about 'employability,' and consider in tandem how individuals can be better equipped to be more resilient, cope with uncertainty in fast changing labour markets and make successful labour market transitions through promoting the concept of 'career adaptability.'

1. Focus upon promoting (career) adaptability

Career adaptability refers to the capability of an individual to make a series of successful transitions where the labour market, organisation of work, occupations and organisational ways of working may all be changing. This approach involves seeking to develop personal characteristics, like being proactive and flexible, as well self-regulatory competencies that shape career adaptive behaviours, including individuals seeking new challenges or wishing to engage in continuing personal development. Learners, teachers, trainers and employers need to recognise that it is crucial that young people and adults at all stages of their career progression are ready to continue their development in increasingly demanding employment, education or training contexts.

The focus on adaptability can be complementary to other education and training goals, it is just that attention is given to the need for individuals to be aware of possible subsequent labour market transitions, not just concentrating on achieving the first transition into work. So let us look at the experiences of those who have demonstrated their career adaptability by making a series of successful labour market transitions.

2. The role of learning in successful labour market transitions

There are four key dimensions relating to the role of learning in developing career adaptability: learning through challenging work; updating a substantive knowledge base (or mastering a new knowledge base); learning through (and beyond) interactions at work; and being self-directed and self-reflexive.

Challenging work can help individuals adapt across their career through the iterative interaction between work and personal development. Indeed mastering challenging work in one field can help build a platform from which to adapt to work in other fields. Interestingly, where employers tried to institutionalise support for higher skills development, as well as supporting the development of technical or practical expertise they also sought to encourage staff with the ability to support the learning of others and have the ability to think through and, if necessary, bring about changes in the ways that tasks are tackled.

Having successfully mastered a disciplinary, vocational or specialist knowledge base (associated with completion of an apprenticeship, vocational training, graduate or postgraduate training) could provide a platform for subsequent learning for labour market transitions. Initial studies in higher education and/or in vocational training were often seen as relevant in some way to their current jobs, even when they were working in a different occupational area from that for which they had originally studied or trained. This was because they had learned particular ways of thinking and practising that stood them in good stead for the rest of their career. The actual knowledge base itself, however, often required considerable updating and this could be achieved partly through reflection on experiences at work and partly through career development activities away from work.

Opportunities for 'learning by interacting' are often seen as a key component of learning-rich jobs, where you can learn from interacting with patients, colleagues, customers, clients etc. Participation in and learning through interacting within communities and networks is a fundamental way for re-constructing a sense of the whole work process as well as a vehicle to develop expertise, including how to communicate effectively in different contexts.

At work, being self-directed through taking advantage of learning opportunities is helpful for individual development. Being self-reflexive and able to identify your current skill set and how this might be enhanced and extended is useful. Those who make successful transitions are often self-directed in either or both their learning and development and their career more generally: if you can learn to adapt and continue to develop in your current job, even in less than ideal circumstances, then this provides a basis for making successful transitions in future.

3. Supporting the development of adaptability in initial education, training and employment

In this view the key challenge is to ensure that initial education and training requires young people to complete challenging tasks (involving practical, cognitive and communicative demands); master a substantive (vocational, technical or disciplinary) knowledge base; engage in collaborative tasks so that they learn through interactions, and become increasingly self-directed and self-reflexive.

There is a psychological dimension of how being self-directed (and successful in making transitions) reinforces your confidence that you will be able to do this again in the future. Those individuals who see that their skills can be transferred to other contexts have significant advantages in changing career direction over those who define themselves almost exclusively by their occupational and organisational attachments. This advantage stems from the former having a dynamic sense of themselves, as being able to navigate their own route through the labour market, whereas the latter are dependent upon the pathways linked to a particular organisation or occupation.

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ESCAPING EUROPE'S MIDDLE AGE TRAP

Edoardo Campanella

A new social catastrophe is looming over the old continent. Due to a combination of rapid technological progress and fast economic integration, millions of people are slowly and inadvertently falling into a middle-age trap – a situation in which they are too old to work, but too young to retire.

At present, thanks to high entry barriers and seniority-related benefits, workers in their late forties and early fifties enjoy stable employment, control the political system, and are less vulnerable to economic downturns than their colleagues who are closer to pension age. According to the OECD, from 2008 to 2012, unemployment among Europeans aged 45-54 increased from 5.2% to 7.7%, while youth unemployment jumped from 15% to 21.4%. Today, four million people aged 50-64 are unemployed, compared to six million aged 18-24.

But middle-aged workers' enviable conditions will soon begin to erode.

1. Disruptive innovation favours the young

In the advanced world, traditional industries that employ older workers are rapidly

disappearing under the pressure of emerging economies. And the companies that are replacing them – such as high-tech start-ups – are the prerogative of workers under 40. At the same time, disruptive innovations – such as 3-D printing, advanced robotics, and autonomous vehicles – will revolutionise the business landscape, creating new opportunities mainly for young minds.

In such a dynamic environment, workers can prosper only through continuous skills upgrading, willingness to move, and entrepreneurial resourcefulness. This gives young workers a major advantage. After all, it is far more difficult for middle-aged people to acquire new competencies, uproot themselves for a job (owing to more binding family constraints), or assume the risks associated with starting a business.

2. Intergenerational tensions will grow in Europe

With a quickly ageing population and flourishing pro-youth movements – in both business and politics – the situation in Europe will be even more acute than in the United States. But the pain will not be shared evenly across the Eurozone. To rebalance their budgets and regain competitiveness, peripheral countries will eliminate thousands of public-sector jobs – the very jobs that middle-aged workers dominate.

While the job market is rapidly marginalising older workers, stricter retirement policies will prolong their employment agony. In such an environment, the risk of social instability and political polarisation will increase. Trade unions, reinvigorated by the despair of marginalised middle-aged workers, will question the system's fairness. Young people, eager to overcome years of hardship, will defend an economic model that rewards fresh minds and flexible lifestyles. Eventually, these tensions will erode social cohesiveness.

In order to safely avert the middle-age trap without endangering already fragile public finances, Europe's progressives should reinvent the role of government in the economy, promote inclusive societies and tame disruptive market forces.

3. Set global labour standards and pick the winners

Globalisation, reinforced by a rapid process of technological progress, is responsible for the gloomy employment situation of middle-aged workers. Although repressing

innovation is not an option, European progressives can still mitigate the effects of globalisation in two ways. First, they should push for an expedite and successful negotiation of the Transatlantic Trade and Investment Partnership, in order to set global labour standards and indirectly protect those industries that are more exposed to the competition of cheap labour from emerging economies. Second, Europe's social democrats should adopt a well-coordinated European industrial policy to preserve and promote some of the most vulnerable sectors that might become important sources of growth in the future.

4. Provide lifelong training opportunities

The euro will contribute to the marginalisation of middle-aged workers by preventing national governments from using competitive devaluations to preserve declining industries. At the same time, Europe's massive public debt will limit policymakers' ability to protect vulnerable workers through the adoption of generous safety-net programmes. For this reason, middle-aged workers can survive only by upgrading their skills. Given the growing fiscal constraints and the inefficiencies of centralised educational programs, European social democrats should promote public-private partnerships to fill the skills-gap. In exchange for tax-credits, companies should allocate part of their scarce resources to the establishment of appropriate and targeted educational programs for people in their late forties or early fifties. In the case of small and medium-size firms, business associations should coordinate these programs. If well-structured, these life-long learning programs will let the economy grow faster, thus allowing governments to preserve their spending in order to grant the aforementioned tax-benefits.

5. Reward skills, not age

In today's world, skills tend to rapidly depreciate and work-experience is not a valid surrogate for more updated competencies anymore. Although it is politically costly, progressive policymakers should allow wages to decline after a certain age – rather than increase with seniority – to reflect the fast drop in value of professional skills and boost older employees' appeal. The wage reduction could affect either the net-salary received by the workers or part of the payroll taxes paid by the employers. The former solution might have recessionary effects in the short term but it is more preferable, since it would not effect the sustainability of the welfare states. In addition, retirement should become more gradual, forcing

people in their fifties to work fewer hours than their younger counterparts, thus partially alleviating the youth unemployment problem.

6. Sign a new social contract

European progressives should rewrite Europe's social contract to promote intergenerational solidarity and create an inclusive system capable of merging young people's creativity with older people's wisdom. Organisations both in the private and public sectors should become flatter in order to facilitate the exchange of new ideas. But in highly hierarchical societies, like the European one, this is the most challenging task. But let's be very clear. Even if European policymakers successfully implement this action plan, escaping the middle-age trap will not be without trauma for at least two reasons. First, older people are less prone to acquire new knowledge than their younger counterparts. Second, Europeans, who are accustomed to a particularly generous worker-protection system, will find it more difficult to adjust their expectations to the flexible, knowledge-based model. But the alternative looks gloomier.

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SOCIAL INVESTMENT FOR LONG-TERM RECOVERY

Anton Hemerijck

Europe finds itself at a crossroads amidst the turmoil of the Euro crisis and the aftermath of the global financial crash of 2008. The good news is that by 2013 economic growth returned to Europe. However, many leading economists believe Europe's nascent recovery is far too feeble to seriously overcome the dramatic social crisis that Europe is confronted with today. 24 million Europeans are out of work and youth unemployment has approached catastrophic rates of over 50 per cent in countries like Greece, Portugal and Spain. Moreover, rising inequality and widespread poverty render the Europe 2020 strategy, conceived in 2009 as an 'inclusive growth strategy', in serious jeopardy. In this context, the future

trends related to an ageing society; rising healthcare costs and greater demand for public and social care services all put pressure on existing welfare settlements. The centre-left needs to confront these trends in relation to welfare spending in an era of fiscal constraint with a long-term view to the future.

1. The EU needs a growth strategy

In the absence of a magic growth driver, sustainable employment is the best guarantee for economic prosperity and social cohesion in ageing European societies. Without a long-term strategic focus on job opportunities, easing labour transitions for working families, and improving human capital in all of its members states, while at the same time correcting the incomplete design of EMU, the EU risks becoming entrapped in a semi-permanent lost decade, worse than the one experienced by Japan in the 1990s.

2. Towards a Social Union of active welfare states

In addressing the incomplete design of EMU, which is lacking a fiscal backstop, Loukas Tsoukalis advocates a 'New Grand Bargain' for the EU, while Frank Vandenbroucke makes the case for a 'Social Union' of European welfare states. Because of widening and deepening social imbalances building up in the Eurozone, the E(M)U is in need of a social investment pact between countries which are in better budgetary shape and have pursued social investment strategies more consistently in the past, and countries which have been less consistent and have thus experienced dramatic budgetary situations. The macro-economic policy regime that is required is one wherein all governments pursue budgetary discipline and social investment over the medium and long run, and are effectively supported therein.

To convince the larger European democratic publics, in terms of political legitimacy, consistent with norms of social fairness, such a macro strategy should be tangibly based on a well-articulated vision of a 'caring Europe', caring about people's daily lives and future social wellbeing. This places great demands on the political leadership of the left to build coalitions of support within and across national constituencies for a more inclusive social Europe to meet widely shared needs, with respect to access to decent jobs, education, training, child- and elderly-care, as well as family-friendly employment relations to all European citizens.

Ultimately, the devil is in the detail of the 'goodness of fit' between institutional complementarities in 'stocks', 'flows' and 'buffers' embedded in a larger macroeconomic policy framework at the E(M)U level, through the social investment project and Eurobonds, rendering systemic support to active, but no longer sovereign, national welfare states.

3. Rethinking 'false necessities'

Costly bank bail-outs, automatic stabilisation and stimulus packages have been draining the public purse since 2009. Rising social expenditures and declining public revenues have forced many European governments to cut welfare services and social transfers to the poor, the unemployed and pensioners in order to shore up budgetary solvency. To the extent that this is necessary, it is crucial not to forget the fundamental lesson that (re-)emerged from the global financial crisis that economic and especially capital markets are not self-regulating, self-stabilising, and self-legitimising. While this important lesson is certainly not new, a whole generation of policymakers seems to have forgotten the basic truth that the benefits of global economic interdependence rely heavily on robust and equitable social and political institutions. The welfare state is not to blame, as was the case in the 1970s and early 1980s Great Stagflation crisis.

Of crucial importance, therefore, is how citizens are adversely affected by a crisis that they bear little responsibility in instigating. It is discomfoting that many European governments, including those on the centre-left, seem to relapse into believing economists' axioma that social policy comes with the price tag of hampering growth and competitiveness, a luxury we can no longer afford in the competitive knowledge-based world economy.

The unfortunate 'false necessity,' to use a term coined by Roberto Unger, of stable money, fiscal balance and structural reform, for which persuasive evidence is lacking, harbours a real risk of becoming a self-fulfilling prophecy of deepening social imbalances across the EU. Already austerity overkill is triggering a politics of right-nationalist protectionism across the EU, with particularly adverse consequences for the centre-left. There are therefore strong economic and political arguments in favour of active social investment policies in welfare states, supported by a Europe-wide pact outlining long-term objectives.

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RADICALLY RETHINKING THE WELFARE BENEFITS SYSTEM

Ian Mulheirn

Generous benefits stop people working. That view, crudely put, is at the heart of the increasingly toxic political debate in the UK about benefit ‘scroungers’. And it’s increasingly common. A clear majority of respondents in the long-running British Social Attitudes survey think that unemployment benefits are too high and discourage work – almost double the proportion that thought so 20 years ago. This trend explains why levels of financial support for unemployed people in the UK are now among the most meagre in the developed world. The main unemployment benefit has not risen in real terms since the early 1970s and is now falling.

It is true that stingy benefits give people little choice but to get back to work as quickly as possible. In many countries, recent reforms to cut the length of time for which unemployed people can claim more generous contributory entitlements have resulted in their faster return to employment. One result of the UK’s uniformly ungenerous regime is that ninety per cent of unemployed people are back in work within the year.

Does that make the UK’s unemployment regime an unalloyed economic good? No. For many workers, meagre entitlements and tough benefit sanctions create big problems. Of course, a substantial drop in living standards during unemployment creates financial difficulties and anxiety for families. But it is also economically damaging.

1. Subsidising job search to ensure good skill matches and longer tenure

If set at an adequate level, unemployment benefits play a crucial role in allowing people time to search, not just for any job, but for the right job – one that puts their

skills and experience to the best use. Not only is that good for jobseekers, it also benefits employers and makes the economy more productive. Higher benefits for skilled workers can also facilitate a more flexible labour market: by mitigating the social consequences of redundancy, they oil the wheels of economic change.

Good job matches achieve more than making the best use of existing skills. As the OECD has argued, appropriate matches lengthen job tenure, which improves employees' skills through experience and the greater likelihood of their receiving further training. Poor matches cause workers' prior skills to deteriorate, making past training redundant and raising staff turnover. And in an environment where getting people back to work immediately is the policy priority, there is little or no incentive for workers to invest in their own skills. It makes little economic sense to push an unemployed computer programmer into the nearest retail job just to save the state £72.40 per week in Jobseeker's Allowance. Some economists have identified these dynamics as an important part of the explanation for growing wage inequality in countries where financial support is relatively low.

The result of the UK's subsistence unemployment regime is therefore a bifurcated labour market. Those sucked into to the high-churn segment find no support from our labour market institutions when it comes to progression. Recent Department for Work and Pensions analysis shows that among typical adult claimants of Jobseeker's Allowance in normal economic times, almost two claimants out of three have had at least one other unemployment spell in recent years.

Troubling though these consequences are, the fact remains that more generous unemployment benefits do indeed dampen incentives to find work. For developed countries with traditional welfare state safety nets, this is the perennial dilemma. Can we insure people adequately against the risk of unemployment without damaging incentives and leaving the taxpayer on the hook? Yes, but achieving that goal with the conventional tools is impossible. Two innovations are needed: lifecycle accounts and 'Facebook' welfare.

2. Creating integrated lifecycle accounts of pensions and unemployment savings

By 2018, tens of millions of UK employees will be saving in a private pension

thanks to auto-enrolment. Whatever its other merits, pensions auto-enrolment risks diminishing people's already low rainy-day savings in favour of locked-up retirement saving. This is likely to exacerbate the job search problem. But auto-enrolment could be extended to create an integrated lifecycle account system of pensions and unemployment savings, allowing people to protect themselves against unemployment risk as well as longevity risk.

On hitting unemployment a person's benefits would automatically be topped-up to 70% of their prior earnings, funded from their personal lifecycle account, for up to six months' unemployment. By cushioning the financial blow of unemployment this would give unemployed people time to look for the right job. But in spending their own retirement money, jobseekers would have strong incentives to strike the right balance between taking any job today versus a more appropriate one tomorrow.

What about people with patchy work histories who have no lifecycle savings to dip into – those accused of getting 'something for nothing' from the benefits system? Lifecycle accounts combined with relationship-based financial support – rather like developing country microfinance – could revolutionise our welfare state and resolve the fundamental dilemma at its heart. The model is called 'Facebook' welfare.

3. Putting compassionate obligation at the heart of the welfare state

Those without savings would be able to borrow from their lifecycle accounts if they could nominate three guarantors from among their friends and family. People would be able to go into the red whilst unemployed, giving them a higher income than benefits alone would allow. But the guarantors would stand surety for a small portion of their friend's borrowed money if that person subsequently failed to get back to work and repay.

Benefit recipients would have a better level of support in the early weeks of unemployment. But in return they would be directly accountable to their closest friends and family for their work search efforts. Facebook welfare would therefore draw on the resource of social networks to help people find appropriate work, while also making them accountable to their social group in a much more immediate way than through the anonymous jobcentre.

There is a route out of the negative debate about benefit 'scroungers'. Policy can help people to insure themselves against the damaging consequences of unemployment while removing perverse incentives and making our workforce more productive. But it will take a radical rethink of a welfare benefits system that is marooned in the 20th Century. Relationship-based Facebook welfare would put compassionate obligation at the heart of the 21st Century welfare state, for the benefit of all.

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TOWARDS A PROACTIONARY WELFARE STATE

Steve Fuller

The welfare state has an image problem for which its defenders bear the lion's share of the blame. Rooted in an understanding of uncertainty driven by fear rather than hope, the welfare state is seen by both its defenders and its detractors as mainly designed to protect people from threats rather than promote them to seize opportunities.

1. The problem with the precautionary principle

Consider the significance of the 'precautionary principle' in European Union law, especially in matters relating to health and the environment. The precautionary principle is the Hippocratic Oath writ large: in policy matters, above all do no harm. Although the principle has not been adopted categorically and its adoption has not always proven bad, it regularly functions as a brake on the pace of innovation. Precaution operates as a default position in the drafting of legislation, trading illegitimately on the idea that any state is empowered to uphold a fixed ideal of material well-being across great expanses of space and time.

This is not to say that states should not be concerned with future generations. On the contrary, they should develop policies that enable denizens of the future to live most effectively in the world that we will have bequeathed them. But our

policies should focus less on maintaining today's standards indefinitely than on ensuring that tomorrow's citizens can take full advantage of the distinct sphere of freedom that is afforded by the conditions and resources they are likely to inherit – their 'room to manoeuvre' (Spielraum), so to speak.

2. The proactionary principle

The default setting for any future welfare state legislation should be the exact opposite of the precautionary principle, the proactionary principle. The philosopher Max More introduced this principle in 2004 in response to the interim report of George W. Bush's Bioethics Council, which had called for science and technology to lower its ambitions to enhance the human condition (notoriously on stem cell research.) In contrast, More argued that what raises Homo sapiens above other creatures is our capacity for calculated risk-taking, which has enabled our species over a relatively short period to dominate the planet. The proactionary principle envisages humanity as a seasoned gambler, who continues to raise the stakes but loses affordably and with an eye to clues about the best strategy for future wagers. A proactionary welfare state prepares people to inhabit this self-conception of our species.

At the moment, only self-described 'entrepreneurs' are licensed to be openly proactionary – and then only with respect to explicit wealth creation. Such people are understood to be uniquely predisposed (perhaps due to prior wealth?) to flourish in an environment of 'creative destruction'. However, a proactionary welfare state would democratise – and thereby demystify – the entrepreneurial attitude. But how can this attitude be instilled in the next generation? Modern Western intellectual history teaches three general lessons with clear policy import.

3. Altruism is ultimately the result of risk-taking if not the intention

Any truly successful innovation (almost by definition) benefits others more than the original innovator and investors. Few entrepreneurs ever anticipate the radical changes they make to the world, which effectively sow the seeds for their rivals and successors. A proactionary welfare state enables people to take on board the debt they 'always already' owe to their precursors, so as to behave as worthy of this gift. Thus, contrary to the precautionary principle, the lesson to learn from the risky and often outright violent experiments of our ancestors is not that those risks should be minimised in the future. Comparable levels of risk-taking should

be encouraged, but with improved mechanisms for monitoring and publicising consequences, as well as for providing adequate compensation, if not restitution, for those violated in the process. Progress may thus be measured by how freely and knowledgeably people accept greater levels of risk.

4. Adapting our value preferences to changing circumstances

In the history of science and technology, innovation's opponents were often strictly correct but their objections were side-lined as a new generation was born adaptive to the new world. An obvious case in point is the automobile's replacement of the horse as the primary mode of personal transport in the early 20th century. Yes, the air became polluted and people became isolated from nature, but the worst aspects of these problems were handled through catalytic converters and tighter pollution laws. Otherwise, people implicitly accepted that the automobile's relative ease of maintenance and mobility trumped all the equine virtues combined and provided a new value foundation in which speed and convenience are paramount, spurring still further innovation. In the context of the current global climate crisis, the Hartwell Paper of 2010 exemplifies this sensibility by suggesting that our focus should be shifted towards more pragmatic risk management.

5. The value of life is not reducible to living it

This is the largest and most difficult lesson because it calls on people to consider everything they value as negotiable, including their own lives. A proactionary welfare state would remove the taboo that locates the value of life primarily in the body of one's birth. The legacy of decisions taken in one's life would play a larger role, as risk-takers are rewarded in ways that keep their spirit alive even if their material existence undergoes radical transformation. Implied here is a more liberal and transparent culture of compensation for damages, preferably in economic terms. In this context the classic welfare state's idea of a 'social safety net' would need to be reconceptualised. Proactionaries want to live in a world where people are not protected from the worst consequences of their actions but are recognised for having done as much as they could with the resources available to them.

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SKILLS FORMULATION MUST BECOME EVERYBODY'S BUSINESS

Andreas Schleicher

In today's world economy, education and skills are the driving forces for progress. Wealth and individual well-being, in turn, depend on nothing more than on what people know and what they can do with what they know. There is no shortcut to equipping people with the right skills and to providing people with the right opportunities to use their skills effectively. And if there's one lesson the global economy has taught policymakers over the last few years, it's that we cannot simply money print or bail ourselves out of a crisis. Instead, investing in high-quality education will be key for improving the economic and social well-being of people around the world.

1. Higher skill levels provide access to better-paid and more-rewarding jobs

For the first time, the Survey of Adult Skills allows us to directly measure the skills people currently have, not just the qualifications they once obtained. The results show that what people know and what they do with what they know has a major impact on their life chances. On average across countries, the median wage of workers who score at Level 4 or 5 in the literacy test – meaning that they can make complex inferences and evaluate subtle arguments in written texts – is more than 60% higher than the hourly wage of workers who score at or below Level 1 – those who can, at best, read relatively short texts and understand basic vocabulary. Those with poor literacy skills are also more than twice as likely to be unemployed.

It works the same way for nations: the distribution of skills has significant implications for how the benefits of economic growth are shared within societies. Where large shares of adults have poor skills, it becomes difficult to introduce productivity-enhancing technologies and new ways of working. And that can stall improvements in living standards.

In all countries, adults with lower literacy proficiency are also far more likely than those with better literacy skills to report poor health, to perceive themselves as objects rather than actors in political processes, and to have less trust in others. We can't develop fair and inclusive policies and engage with all citizens if a lack of proficiency in basic skills prevents people from fully participating in society.

2. 80 million people do not possess the most basic skills needed to succeed in today's world

The case for acquiring and maintaining literacy skills is clear, but people's proficiency varies widely. Roughly one in five adults in Japan and Finland reads at the highest levels on our test. In contrast, in Italy and Spain just one in twenty adults is proficient at that level, and more than one in three adults perform at or below the baseline level. And even highly literate nations have significant shallow areas in their talent pools. Across the 24 countries that took the test, more than 80 million people do not possess the most basic skills needed to succeed in today's world. On top of that, in the United States, Poland, Germany, Italy and England, a difficult social background often translates into poor literacy skills.

And yet, the Skills Survey shows that some countries have made impressive progress in equipping more people with better skills. Young Koreans, for example, are outperformed only by their Japanese counterparts, while Korea's 55 to 64 year-olds are among the three lowest-performing groups of this age across all participating countries. The results from Finland tell a similar story. But young Brits and Americans are entering a much more demanding job market with similar literacy and numeracy skills as their compatriots who are retiring. The share of these countries in the global talent pool will shrink significantly over the next decades unless urgent action is taken both to improve schooling and to provide adults with better opportunities to develop and maintain their skills.

3. Time to update and re-define our education qualifications

What the data also show is that actual skill levels often differ markedly from what formal education qualifications suggest. In most countries at least a quarter of university graduates do not score higher than Level 2 on our literacy test, and are thus insufficiently equipped for what their jobs demand of them.

Conversely, in Australia, Finland, Japan, the Netherlands and Norway, more than one in four adults without a high school degree have made it to Level 3 in literacy, which shows that people can, indeed, recover from poor initial schooling. Surely there are many reasons why skills and qualifications differ; but these data suggest that we may need to update and re-define our education qualifications.

4. Take note of the promise of high-quality lifelong learning opportunities

We can't change the past; but we can do something about our future. The Nordic countries, the Netherlands and Canada, for example, have been much better in providing high-quality lifelong learning opportunities, both in and outside the workplace, than other countries. They've developed programmes that are relevant to users and flexible, both in content and in how they are delivered. They've made information about adult education opportunities easy to find and understand, and they provide recognition and certification of competencies that encourage adult learners to keep learning. They've also made skills everybody's business, with governments, employers, and individuals all engaged.

5. Make the most of a skilled population

All this said, skills are only valuable when they are used effectively, and the Skills Survey shows that some countries are far better than others in making good use of their talent. While the US and England have a limited skills base, they are extracting good value from it. The reverse is true for Japan, where rigid labour-market arrangements prevent many high-skilled individuals, most notably women, from reaping the rewards that should accrue to them. But underuse of skills is visible in many countries, and not just for women. It is also common among young and foreign-born workers and among people employed in small enterprises, in part-time jobs or on temporary contracts.

To do better, countries need more coherent, easy-to-understand certifications that aren't just about degrees, but also incorporate formal and informal learning in life. Where people lack skills, countries need better policies that incentivise employees and employers to invest in developing relevant skills.

6. Skills must become everybody's business

None of this is going to work unless skills become everybody's business; unless governments provide education that offers the right skills and makes learning available to all; unless employers and trade unions' greater investment in learning translate into better-quality jobs and higher salaries; and unless we all take more responsibility for our learning and make better use of learning opportunities.

None of that is easy, but global comparisons like the Survey of Adult Skills show everyone what's possible. They take away excuses from those who are complacent. And they help set meaningful targets in terms of measurable goals achieved by the world's most effective policies.

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RETHINKING EDUCATION IN THE DIGITAL AGE

Tom Kenyon

Digital technology has redefined almost every aspect of our lives, but despite billions of pounds in investment, traditional education systems have not been able to keep up with the rapid pace of digital innovation. This is true both in terms of the skills we teach our young people and in terms of how technology can enhance teaching and learning. In order to reap the potential rewards of education in a digital age, we have to look beyond the use of software as an administrative tool; beyond the mythical silver bullet solutions of new hardware; and beyond the teacher as a gatekeeper of information. Our behaviours need to change.

1. A digital age requires digital skills

The world runs on machine languages. From cars to banking to healthcare, every interaction we make is mediated by computer programming. To fully engage in this new reality, young people require an understanding of how digital things are made, alongside a critical understanding of online information and an awareness of our personal digital footprint.

There is an international movement to teach 'code' as a way to understand and make technology. In the UK *Make things Do Stuff* partners provided over 100,000 digital making experiences. The sell for many of these campaigns is that an understanding of computer science will lead to better jobs. However the need for digital literacy is more fundamental than 'just' getting more young people to go

on to become professional developers or computer scientists. An understanding of how technologies work, and how they can be remixed, adapted and shared is relevant to every industry and to society as a whole. The potential of a generation of digital makers becomes really interesting when the ability to innovate digitally is in the hands of doctors, lawyers, historians and government workers.

2. Transform the learning experience for a digital age

A lot of money has been put into the purchase of digital hardware in schools, yet this investment hasn't seen a commensurate transformation in learning. Nesta's report *Decoding Learning* shows that no technology in its own right has a major impact on learning; impact depends on how it is used. However, used effectively, digital technology can amplify the impact of best practice pedagogy. Many teachers are doing excellent work using technology in creative ways to support rich learning. You can find great examples of this through teacher blogs and twitter as well as at informal meet ups and trade shows, but they are the exception. Professional development for all teachers must be a primary concern for all countries who want to teach digital skills and to use technology to improve teaching and learning.

As Michael Fullan and Maria Longworthy argue, we need a new pedagogy to take advantage of the transformative potential of technology. They propose using digital tools and resources alongside deep learning tasks with a view to creating a learning partnership between pupils and teachers. The models of the teacher as subject matter expert broadcasting to a class is outdated, no matter how inspirational the speaker.

3. Change classrooms infrastructure

One to one tablet computers change the requirements of classrooms. In the UK and around the world there is a rapid expansion of use of tablets in schools, inevitably accompanied by controversy as to whether this is good or bad for education. This is the wrong question. The adoption curve for tablets is faster than any other consumer technology. Every student will have access to one within 10 years, and at the very least it will be their primary reading device. Tablets give ubiquitous access to online information, adaptive learning platforms, remote tutoring, collaborative multiplayer environments, augmented reality, cameras and image recognition.

The question we should be asking is: *how do we prepare for this shift?* Alongside research into new pedagogies, schools must prepare for the practicalities of their students using connected devices. All schools will require robust wifi and broadband provision, access to multiple chargers, quality headphones. Schools need a procurement policy for educational apps and use of online resources. Teachers and schools need practical advice, guidance and governance to benefit from these affordances and transition successfully to connected classrooms.

4. The cram and exam model is outdated

The cram and exam model is an outdated mode of assessment of student knowledge and skills. Traditional summative exams are not sufficient to assess vital 21st century skills such as creativity, problem solving, communication and collaboration. More importantly, pupils and students should be able to learn from assessment of their performance in a way that the snapshot of their working memory demonstrated by the traditional 3 hour examination makes impossible.

Ubiquitous computing means a paradigm shift in the amount and the detail of data that is generated by learners. In a world where students' work is increasingly digitised, user analytics can provide teachers and students with rich real time feedback and assessment that they can respond to and learn from. Adaptive learning platforms can map their users' mastery of different concepts, and some institutions are leading robust trials into the use of games as an assessment platform. Concurrently, the Open Badges movement proposes a solution to the limitations of traditional qualifications, democratising the accreditation of different skills and showcasing student work in a meaningful digital portfolio of work that can demonstrate value to future employers.

Tom Kenyon is director of education at Nesta

STEM GROWTH

Averil Macdonald

A recent survey by McKinsey indicates that skills shortages are harming business growth across the EU, with the problem being blamed on lack of adequate training, even though 74% of education providers were confident that their students were prepared for work. In the UK, the problem is particularly acute for the engineering sector, where a report by the Royal Academy of Engineering estimated that Britain would need more than 800,000 such workers between 2012 and 2030, but that UK universities were projected to turn out only 32,000 engineering graduates a year. So why is there a mismatch between skills provision and what companies need? Or is it, in fact, a fallacy?

1. The STEM brain drain

In the UK, a concerted effort to encourage young people to study STEM (science, technology, engineering and maths) beyond compulsory school age is having an effect. Many university Physics departments now receive over 1000 applications from UK students for around 100 places, whereas only 10 years ago comparable departments were being closed due to lack of applicants. Indeed, if more UK school students do want to study STEM degrees the departments are now at capacity so there's nowhere for them to go. And yet, STEM based companies bemoan the lack of applicants with appropriate skills. Is it that students today are less well prepared than 10 years ago? Or could it be that the best students are actively choosing not to pursue careers in STEM industries?

2. Tough competition for high-skilled graduates

Studies have shown that 50% of male STEM graduates and 75% of female STEM graduates choose not to follow careers in STEM industries. Instead they are seduced throughout their time at university by non-STEM businesses that realise the value of a high quality STEM graduate's skill set. While non-STEM businesses go 'talent spotting' to identify the best students through careers talks, networking events, CV advice workshops and internships, STEM employers sit back assuming that, having persuaded the young people to embark upon a STEM degree, their work is done and the new STEM graduates will soon emerge.

3. STEM companies need to step-up

A policy that simply seeks to increase the numbers entering STEM degrees fails to realise that students' careers ambitions remain fluid. For students today, the need to secure a job offer is paramount and an internship is seen to be one of the best ways to do this. The majority of internships are in business, banking, marketing and communications, with high quality STEM undergraduates quickly snapped up for these positions. Consequently, unless STEM companies are prepared to nurture STEM undergraduates and match the opportunities that non-STEM companies offer, they will continue to miss out on the highest quality graduates.

Conversely, perhaps there is a need to improve the employability skill set of all students. Clearly teachers and lecturers who have never worked in industry or business are not well placed to do this. Instead, the best people to provide this training are employers themselves and work-placements or shadowing can play a significant part here – both for students and for their educators. A national programme of work-shadowing by teachers of employers and vice versa would ensure that both participants are fully aware of the skills needs and opportunities.

4. Closing the gender gap requires a new approach

It is often assumed that simply increasing the number of female STEM students will address the skills shortage. Two reports by the Institute of Physics, 'It's Different for Girls' and 'Closing Doors – exploring gender and subject choice in schools,' indicate that girls actively choose subjects that they consider will enhance their career choice. Those girls who choose to drop Physics at age 16 state that they consider that it closes down their career options, leading only to three jobs: a scientist; a teacher or an engineer, while of the 7000 females in the UK who take the Physics A-level each year, only 700 elect to study Physics at university while many more choose maths because they consider it to be more flexible, offering more career options.

5. Career guidance needs urgent attention

Most teachers are equally poorly informed as to the career options available from STEM qualifications and, now that UK teachers have responsibility for providing careers education, it is likely that fewer girls will be told of the wide range of STEM careers open to them. A recent campaign from WISE (Women in Science and Engineering) in the UK comprised a poster for schools listing '101 Jobs from

Science and Maths'. Simply seeing the job titles inspired many young students to look more actively into what the jobs entailed.

The current approach to careers advice, if it exists at all, is to advise the young person how to gain the qualifications required to follow the path that they, themselves, have identified as being of interest. There is no attempt to suggest possible jobs from which they may select. This could be one reason why large numbers of young people indicate that their careers advice came mainly from their families and that the majority of those choosing STEM careers have a family member already employed in a STEM business.

6. Female-friendly recruitment practices

Even when they do enter STEM degrees, only 25% of female undergraduates seek STEM employment on graduation. Our research has shown that females are put off applying for STEM posts by the form and content of job advertisements from STEM employers. STEM employers need to consider more what their potential employees, both male and female, are looking for.

The research also indicates that female undergraduates were attracted by companies that seemed friendly, even humble, were concerned about the welfare of their employees, and offered the opportunity to make lifestyle choices, such as career breaks and working part-time, without limiting promotion prospects. Female applicants also want a statement of the salary on offer as they realise that they will come off badly in a salary negotiation – a fact that is often cited as one reason behind the gender pay gap. If companies genuinely want the added quality that female employees bring, then they should not expect them to become proto-males.

6. Co-ordinating STEM growth

The current policy of inspiring young people to study science for the inherent fascination of the subject is failing to increase the numbers entering STEM careers. A policy of integrating STEM employer input about the range of career opportunities from STEM qualifications directly into course content, particularly around age 14 when students are losing their natural enthusiasm, alongside a policy of businesses nurturing STEM undergraduates with support, career

information and internships would result in far more enthusiasm for STEM employment and bring the required skills of talented students back to the waiting STEM employers.

Averil Macdonald is professor of science engagement at the University of Reading

EUROPE NEEDS A TALENT OFFENSIVE

Christal Morehouse

Large-scale European talent surpluses will soon be confined to history books. With a sustained, low total fertility rate of between 1.4 and 1.6, Europe as a whole is in a state of demographic decline. The continent's small but potent human capital endowment is in depletion. Europe is nudging past its demographic tipping point – in the wrong direction. However, buffered by the positive impact of immigration, European leaders often view the very real challenges of the continent's demographic implosion (which will soon be compounded by the baby-boomer-exit) as far removed from today's labour surplus crisis. According to projections by the World Economic Forum and the Boston Consulting Group, in less than two decades, Western Europe will need to attract a workforce equivalent to the size of the current working population of its largest economy, Germany, in order to sustain economic growth. During the same period, the United States will need to add more than 25 million workers to its labour force. Competition for talent will increase.

1. Get over the intra-EU mobility molehill

The current political debate regarding intra-EU labour mobility neglects the fact that this mobility remains a relative rarity across the EU. According to Eurostat and the European Labour Force Survey, in 2012 just 6.6 million workers in the EU27 were citizens from another EU member state. This equates to roughly 3% of the EU labor force, 2% of the total working age population (15 to 64 year olds) and 1.3% of the overall population of the EU27 in 2012. Introducing regulations that would infringe upon the rights of all EU citizens' mobility would be like cracking a nut with a sledgehammer. It is rather the lack of intra-EU labour mobility that

is demonstrably holding Europe back. The European Council estimated the economic losses due to economic inactivity or unemployment among young people to be 153 billion euro in 2011. That is roughly 1.2% of EU GDP.

2. Go on a talent offensive

European member state governments need to understand that the future talent pipeline is not secure, and that intra-EU labour mobility is likely to only ease growing labour market gaps in the short and medium-term. The EU must form long-term *global* talent strategies. And the countries most bemoaning talent inflows could soon lose their shine in the eyes of the world's highest skilled workers.

The risks of getting talent policies wrong are truly worrying. Innovation, sustainability, and prosperity all hang in the balance. This challenge will engulf not only Europe. The 21st century will be one in which, for the first time in human history, there will be a global onset of peaceful demographic decline.

As competition for talent grows and hubs of innovation compete with each other, countries need to develop a strategy for feeding the talent pipeline that extends beyond their own borders, to supply the necessary talent growth. This strategy cannot be conceived of in isolation. It has to be developed in partnership with a new understanding on the part of the international community and its rules.

3. Time for a 'European fair deal on talent'

Rather than offending international talent, Europe should develop a talent offensive for the continent. The EU must urgently develop more effective strategies for fostering EU mobility. A 'European fair deal on talent' strategy could contribute to the EU's economic competitiveness as a bloc as well as to the economic rebalancing among its member states.

In cases where this talent is employed to the benefit of another EU country, a 'talent mobility stabiliser' mechanism could be implemented in the short-term by EU member states. This means that the talent-lending country could receive a 'talent investment package' to grow its future domestic talent pool and improve employment prospects at home. Such an initiative could be referred to as a European fair deal on talent.

4. This requires a talent mobility stabiliser

The temporary talent mobility stabiliser would consist of an economic package administered at the EU level. In accordance with benchmarks, EU countries that are net beneficiaries of talent could target investment at EU countries that 'lend' domestically grown talent to their neighbours, in the short-term. Such an economic package could be ring-fenced to benefit programmes that develop the talent pipeline and reduce unemployment through, for example, investment in education, training, lifelong learning and in skills-matching initiatives. Potentially, talent hubs that are adjusting to providing services to a large influx of residents could benefit from such an investment package.

Such a mechanism would have to be discussed and developed among EU member states. A European fair deal on talent could, for example, be governed by indicators such as: flows of intra-EU mobility and specifically intra-EU labour mobility; scope of employment of EU nationals in other EU countries; overall unemployment and youth unemployment levels in countries lending talent; macroeconomic growth indicators and projections. The collection of benchmarks could include an indicator on unemployment rates among mobile EU citizens. The talent investment package could be included as a component in the next multi-year portfolio of the EU Commission. Or it could be created as a short-term, stand-alone fund at the EU level, initially on a pilot basis.

5. Embrace the age of human talent

In the short-term, Europe should add to its 'toolbox' for growing and retaining talent, as well as matching that talent with employment opportunities. Talent attracts talent, and its exodus can lead to rapid talent depletion. In the longer-term, the EU will have to develop a strategy for a global fair deal on talent. It will have to invest in growing talent both at home and abroad, as well as compete for mature talent globally.

We are on the threshold of a 'human era' – one in which pooling and supplying money is secondary to amassing the brainpower to create positive change. Already, some refer to the coming age of knowledge-based economies and rapidly increasing global mobility as the age of 'talentism'. It is time to develop a European talent strategy for the short, medium and long-term well-being of Europe.

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As the slow return to growth begins to gather pace in western democracies, the danger is that insufficient attention has been given to structural economic weaknesses and long-term stresses on representational politics and governance. This ranges from technological change and disruptive economic forces to growing insecurity and inequality, fragile tax systems, skills and education mismatches, polarised labour markets, uncertainty over middle income jobs, and vulnerable social security settlements.

Meeting these challenges will require tough prioritisation and radical reform. The aim of this 'handbook of ideas' is to advance political debate by bringing together short policy recommendations and proposals by leading international thinkers on how progressives should approach the major economic and political challenges of our times.

