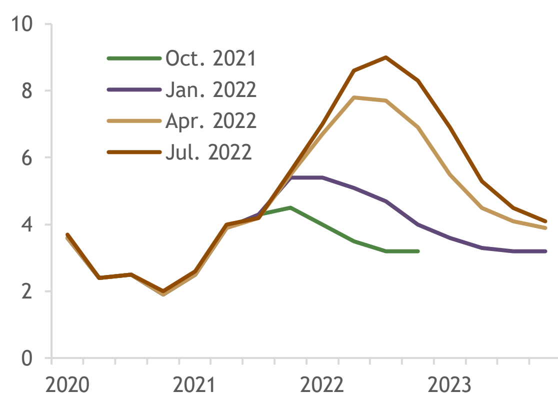
# THE INVESTMENT IMPERATIVE

Inflation has risen sharply around the world. It recently reached a forty-year high in the US, bringing to an end a decades-long run of mostly stable prices. While the recovery is fragile in many countries, and faltering in some, the risk that inflation could become persistent has increased, which is why many central banks are now in tightening mode. However, if we are not careful, tighter monetary policy will choke off investment, just when a surge in investment is exactly what the global economy needs. In fact, raising the rate of investment could make it easier for central banks to control inflation both now and in future. More investment is also essential to address long-term structural challenges. It is therefore imperative that every effort is made to encourage investment, alongside controlling inflation. This paper explains why and what practical steps can be taken to raise the rate of investment in productive assets. Shifting away from rules-based regulation and transactional capital, towards goals-based regulation and engaged capital, is vital. The urgency of this task means the time for policymakers and investors to act is now.

## The current outlook

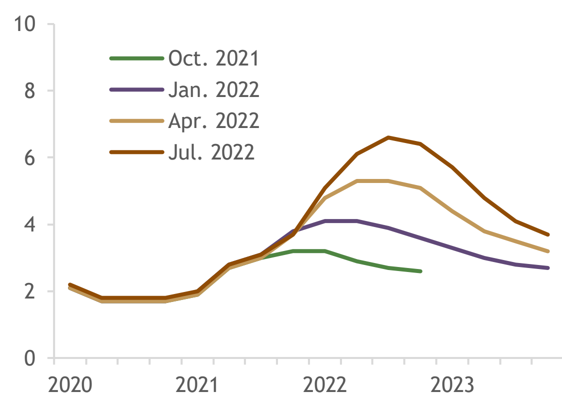
Both headline and core global inflation rates have risen sharply, with forecasts for inflation repeatedly revised upwards over the past year (Figs. 1 and 2). Many factors are driving this including rising commodity prices (Fig. 3), disruptions to supply chains, and tighter labour markets in some countries, combined with an unbalanced recovery in demand from the covid-19 pandemic. The economic fall-out from the war in Ukraine has added to the pressure on energy and some other commodity prices, while adding uncertainty to the macroeconomic outlook. A long period of exceptionally loose monetary policy globally, most importantly in the US, has also contributed to higher inflation (Fig. 4).

*Fig. 1: Headline global inflation forecasts have been repeatedly revised up*
% change; by forecast date




Source: IMF

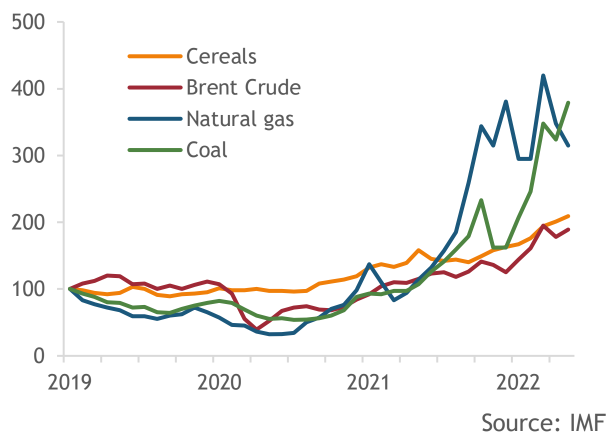
*Fig. 2: Global core inflation forecasts revised up, but remain below headline rates*
% change; by forecast date




Source: IMF

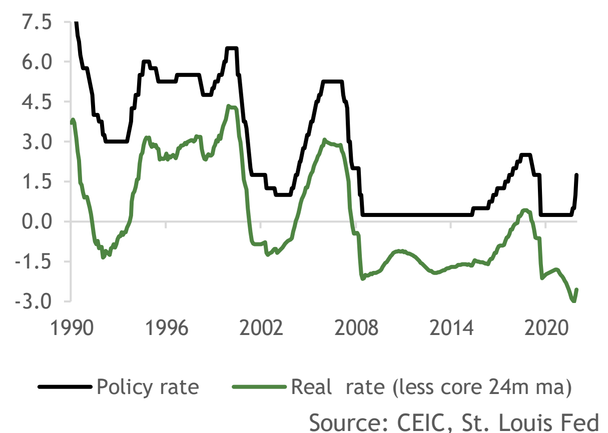
This combination of factors is unusual. It is hard for central banks to counter because inflation is being driven by both demand and supply factors, some of which are temporary. The usual central bank response to demand-driven inflation and an over-heating economy is to tighten monetary policy, while that for inflation driven by negative supply shocks is to hold steady and "accommodate" it. The current combination of supply- and demand-driven inflation therefore creates a dilemma for central banks about how to respond.

*Fig. 3: Commodity prices have been a major driver of inflation*
Price indices, with 1 Jan 2019 = 100




Source: IMF

*Fig. 4: Monetary policy has been exceptionally loose in the US for some time*
Note: policy rate is upper bound of Fed funds rate




Source: CEIC, St. Louis Fed

Monetary policy operates through many channels. It impacts on the demand for credit by firms and on its availability from banks and financial markets through the effect on the marginal cost of credit and the creditworthiness of borrowing firms. As a result, tighter monetary policy – as we are seeing now - restrains investment by firms in productive assets. But more investment is exactly what is needed to address supply-side problems now and so help resolve the dilemma facing central banks. Moreover, more investment is needed to address longer-term challenges facing the global economy.

This makes it essential that we seek to raise the rate of investment in productive assets, even as central banks tighten monetary policy. This task is urgent and is every bit as important as controlling inflation for the long-term health of the economy. The rest of this paper explains why it is imperative that we raise the rate of investment now and offers suggestions for how this can be done.

**Why more investment is needed**

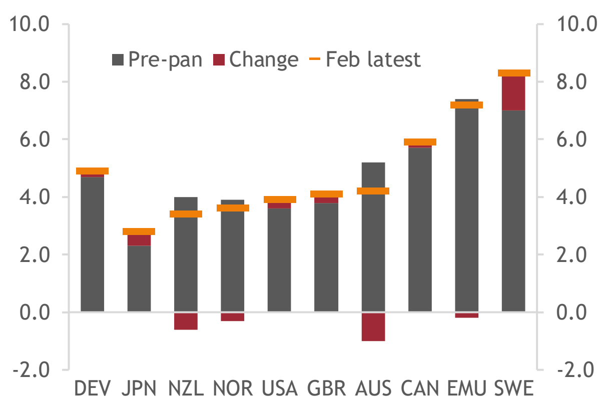
Below we provide four reasons why more investment is urgently required. The first two reasons – to entice workers back into the labour force and to support post-covid structural changes in the economy – are to address pressing supply-side problems. The third and fourth reasons – to make the economy more resilient and to ensure that growth is environmentally sustainable – are about addressing structural problems that require urgent attention.

Supporting the low carbon transition, which will contribute to achieving environmental sustainability by reducing dependence on hydrocarbons, is also made more urgent because of the strategic weaknesses that have been exposed in Europe from dependence on Russian energy imports.

Reason 1: to entice workers back into the labour force

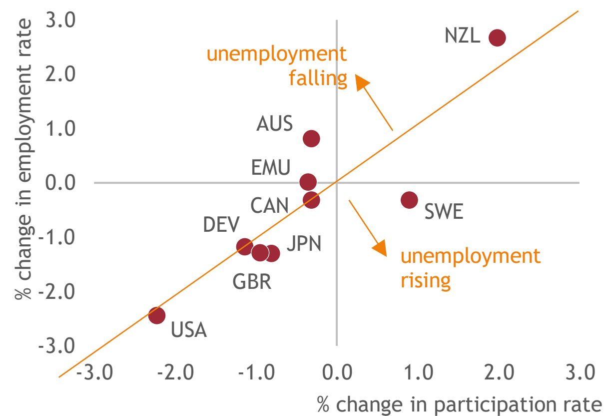
Labour market and social protection policies have varied considerably across countries during the pandemic. In some countries governments chose to protect jobs through furlough schemes, helping to avoid a large increase in unemployment. In others, governments chose instead to protect incomes, providing direct financial support to households, while allowing unemployment rates to increase. In most advanced economies, including those that chose to protect incomes rather than jobs, unemployment is now close to the pre-pandemic rate and high vacancy rates are being reported in many sectors (Fig. 5).

*Fig. 5: Unemployment rates in advanced economies are largely stable*
Note that the pre-pandemic rate is 4Q19 average and the latest is as of 2 Feb 2022




Source: JP Morgan

*Fig. 6: Impacts on employment and participation rates vary across countries*
% change from pre-pandemic (4Q19 average) to latest as of 2 Feb 2022




Source: JP Morgan

The absence of a lasting impact on unemployment nevertheless masks variation in the performance of labour markets (Fig. 6) and in some countries this could have enduring consequences. While unemployment rates are relatively low in the US and UK, for example, participation in the labour force has fallen, meaning that employment rates have not fully recovered and under-employment has increased. This is likely due to a combination of cyclical and structural factors.

In the US, direct income support for households may have reduced the incentive for some workers to return to the labour market. The temporary nature of that income support implies that labour participation will eventually increase once more.

In both the US and the UK, it is also likely that there are more structural changes occurring in labour markets. A study by Pizzinelli and Shibata (2022) – one of the first to examine the impact of the pandemic on labour participation – concludes that a significant part of the

reduction in participation has been caused by older workers choosing to retire early. Duval et al. (2022) look at a wider set of countries and find that the biggest participation changes have been among low-paid and older workers. They find that the pandemic may have changed worker preferences away from low-paid jobs that are contact-intensive, physically strenuous, or less flexible.

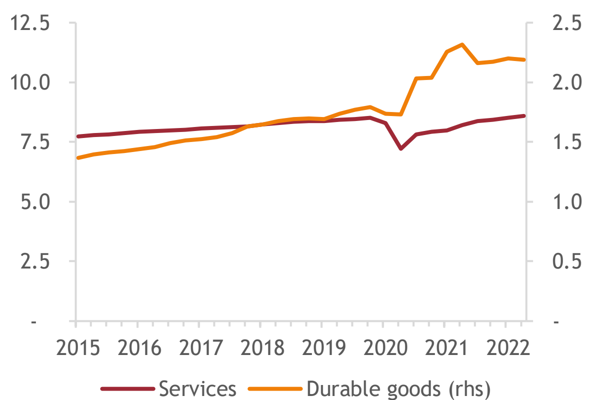
These structural changes are occurring at a time when populations are aging in many countries, which also constrains labour participation and pushes down the overall employment rate. That means the cost of caring for an aging population must be borne by a smaller proportion of the population. That makes it even more important for policymakers to encourage more people to remain active in the labour force, including as they get older.

Increasing the rate of productive investment would help to raise productivity and so sustain higher wage growth. In turn, this would entice more workers of all ages back into the labour force. Essentially, more investment is needed now to turn the so-called great resignation into a new surge in labour force participation, encouraged by better jobs.

Reason 2: to support post-covid structural changes in the economy

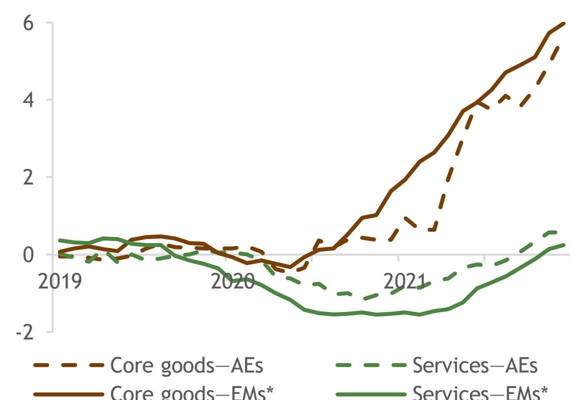
The covid-19 pandemic has led to some remarkable changes in consumer behaviour and the composition of demand. Some changes were forced by restrictions and are already being reversed, but others may prove to be long-lasting, such as where consumers have discovered new goods or services for the first time that will remain attractive to them.

*Fig. 7: US spending has shifted from services to durable goods*
US real personal consumption exp, $ billions




Source: St. Louis Fed

*Fig. 8: Goods inflation has risen faster than services*
% deviation from pre-covid-19 averages; *excludes China



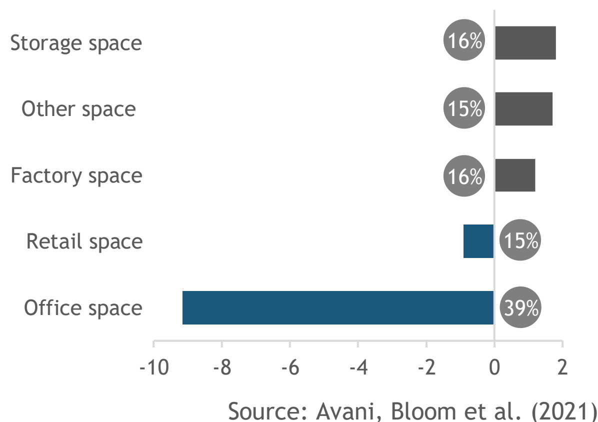

Source: IMF

A notable feature of the recovery in the US has been how imbalanced consumer behaviour has remained, with durable goods consumption much stronger than services (Fig. 7), even as restrictions on in-person services have been reduced. This shift can also be seen in inflation data, which is much higher for goods than it is for services (Fig. 8).

Behaviours of businesses have also changed. Firms are adopting new ways of working to manage remote or hybrid workforces, or to accommodate clients and suppliers as they adjust their own methods of doing business. Firms are offering new products to capitalise on changing patterns of consumption. Firms are also reconfiguring supply chains and supplier relationships, as they respond to disruptions and new cost pressures.

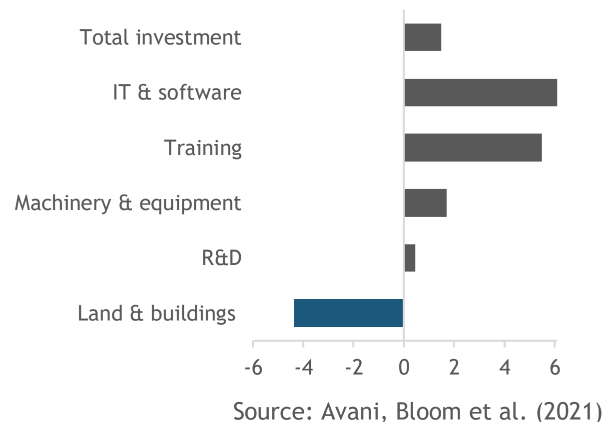
New ways of working mean that companies are reducing their demand for traditional workplaces and investing in more versatile spaces, IT equipment and software that allow staff to work more flexibly. A survey of 3,000 UK firms by Anayi, Bloom et al. (2021) found that companies expect to reduce office space and cut overall investment in land and buildings by about 4%, while increasing spending on training and IT by around 6% (Figs. 9 and 10). Responding to changing consumer demand also often requires different capital equipment, while addressing supply chain risks has implications for both where production is undertaken and who does it.

*Fig. 9: Post-pandemic business demand for space has changed in the UK*
Bars show % change in space use expected by 2022+ from 2019, with 2019 shares circled




Source: Avani, Bloom et al. (2021)

*Fig. 10: Covid-19 is expected to impact on investment spending patterns in the UK*
Expected impact on spending in 2022+, % change from 2019 baseline




Source: Avani, Bloom et al. (2021)

Anayi, Barrero et al. (2021) examine UK and US data and conclude that the pandemic has been a major “reallocation shock” which requires jobs and capital to be shifted both within and between sectors. This could slow the recovery and add to inflationary pressures, with disruptive bottlenecks for supply in some sectors. Bartsch et al. (2022) and Guerrier et al. (2021) argue that this creates a dilemma for monetary policymakers as it means the current bout of inflation may be more driven by sectoral supply constraints than a general resurgence in demand. They advise that policymakers may wish to accommodate higher inflation as a consequence. This is not without risk, however, as inflation expectations could rise and cause inflation to become more widespread and persistent.

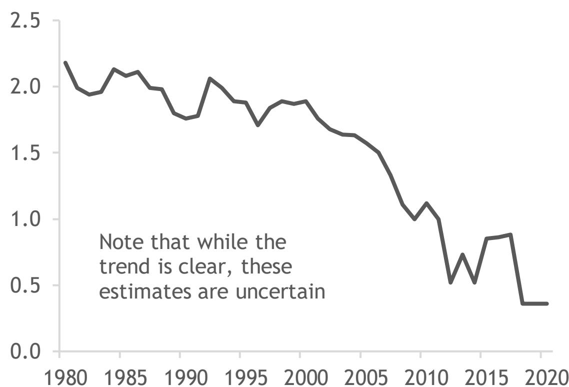
The solution to the challenges described above, and to this dilemma facing policymakers, is to drive up the rate of investment. That is essential to accelerate the structural changes that are required in the economy and in particular to allow capital to flow into those sectors that need to grow. The investment required is likely to be significant and the need is urgent.

Without this, bottlenecks to growth are likely to become more intense, exacerbating inflationary pressures and holding back the recovery.

Reason 3: to make the economy more resilient

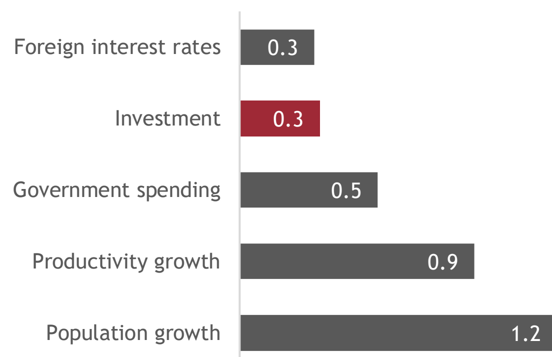
We need to ensure that the economy that emerges after the pandemic is stronger and more resilient. In recent decades, the estimated equilibrium (or neutral) real interest rate – the rate at which the economy is neither too hot, nor too cold, and so inflation is stable – has trended down in many countries (Fig. 11). With aggregate demand in many advanced economies below potential output for much of the period following the financial crisis of 2008, nominal interest rates were reduced by many central banks to the point that they were either at or close to the effective lower bound (near zero or just below). This resulted in policymakers being stuck in a cycle of low growth, while resorting periodically to quantitative easing when the conventional option of cutting interest rates was no longer available.

*Fig. 11: Median estimated neutral real interest rates have fallen*
Percent; sample of 15 advanced economies




Source: IMF

*Fig. 12: Estimated impacts on equilibrium interest rates*
Percentage point change in equilibrium rates following either 1pp or 1% sustained increase in …




Source: Fischer (2016)

Exceptionally loose and unorthodox monetary policy can only do so much to help sustain high growth in an economy. It also has implications for financial investors. The combination of low interest rates and quantitative easing has fuelled hyper-active transactional finance as investors search for yield. As a result, investors have increasingly been focused on price discovery – trying to anticipate changes in financial prices – rather than underlying value. Too many investors have been focused on trying to understand and anticipate order flow and the strategies of other investors, rather than the fundamentals of a business. This has, in turn, increased the risk that the price of many financial assets has become detached from their fundamental value, which could eventually result in a correction in prices and risks to financial stability. Transactional capital also diverts capital from the productive uses needed to drive real growth. Given that rising well-being and disposable income is essential to societal stability, this will undermine resilience in the long-term.

The underlying reason for the fall in equilibrium or neutral interest rates is a mismatch between desired savings and investment. When people want to save more than businesses want to invest, this pushes down the equilibrium interest rate.

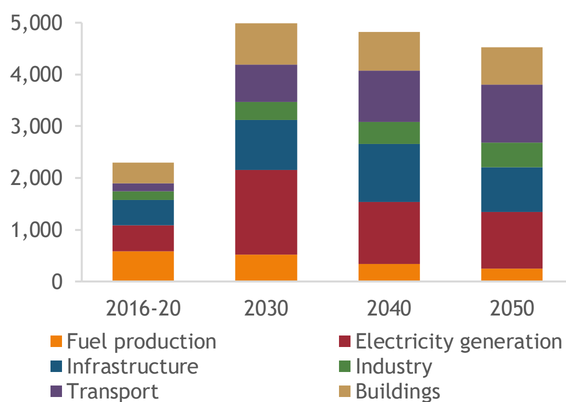
There are many factors contributing to this, including aging populations and inequality, both of which encourage higher global savings. One way for policymakers to address the problem is to do whatever they can to push up the desired rate of investment. Changing the balance between desired investment and savings will raise the equilibrium interest rate, providing central banks with more room to adjust nominal interest rates in future, should there be another downturn. In so doing, it will help to remove one of the biggest threats to the resilience of many economies since the financial crisis.

Fischer (2016) estimates the impact of various macroeconomic variables on equilibrium interest rates for the US. A selection of the results is shown in Fig. 12. He finds that a sustained increase in investment of 1% of GDP will raise the equilibrium interest rate in the US by 0.3 percentage points. He also finds that a rise in foreign interest rates pushes up the equilibrium interest rate in the US, implying that a global effort to increase equilibrium interest rates by raising investment would be mutually reinforcing. Moreover, Fischer finds that higher productivity growth has a powerful impact on equilibrium interest rates, providing another potential channel through which investment can boost the equilibrium interest rate.

<u>Reason 4: to support the low carbon transition</u>

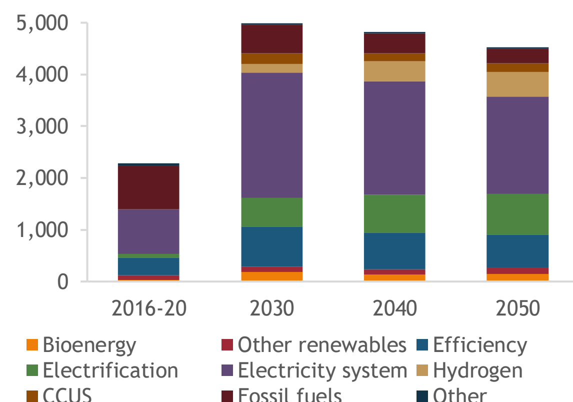
We need high growth to meet the aspirations of a growing global population, and to ensure social stability, but this is only economically sustainable if it is also environmentally balanced. Large-scale investment in new technologies and infrastructure is needed to support that, especially if there is to be a transition to a low carbon economy, with lower use of hydrocarbons.

*Fig. 13: Sustained investment across sectors is needed to cut $CO_2$ emissions*
Annual average global investments to reach net zero by 2050, $ billions at 2019 prices by sector




Source: IEA (2021)

*Fig. 14: Investment across technology areas is needed to cut $CO_2$ emissions*
Annual average global investments to reach net zero by 2050, $ billions at 2019 prices by tech




Source: IEA (2021)

The IEA (2021) estimates that to achieve net zero in $CO_2$ emissions by 2050, global investment in energy will need to increase from just over $2 trillion on average each year between 2016 and 2020 to about $4.5-5 trillion on average each year for the following three decades (Figs. 13 and 14). As a percent of GDP that implies a rise from 2.5% in recent years to 4.5% in 2030 before falling back to 2.5% by 2050, underlining the urgency of the increase in investment that is required. Electricity generation and transport account for a large part of the increased investment needed. Technologies that support electrification, including electric vehicle batteries, heat pumps and electricity-based industrial systems, will also require large increases in investment. The IEA judges that most of the increase will need to come from private sources.

Other estimates of the investment required to achieve net zero are similar, according to Lenaerts et al. (2021). IRENA (2021) concludes that investment may need to be more front-loaded than the IEA estimates, while BNEF (2021) estimates that the total amount of investment required may be somewhat higher.

**How investment can be increased**

The previous section outlined several reasons why more investment in productive assets is essential. In this section we highlight two approaches that we believe should be central to the solution. Together, these could have a transformational impact on the rate of investment in productive assets.

Both approaches focus on raising the rate of private investment. However, policymakers also have an important role to play alongside financial investors and company managers. Neither approach requires a fiscal outlay by governments, which is critical given the pandemic's impact on public finances. Both approaches can also be pursued relatively quickly, providing there is the will to act. The time to do that is now.

<u>Approach 1: reducing the regulatory wedge by shifting to goals-based regulation</u>

For business investment to drive the post-pandemic recovery, regulation must not hold it back by imposing excessive frictional costs which do not contribute to the generation of revenue. At a time when businesses and whole sectors are in need of change, regulation must be flexible to encourage business investment, while still allowing regulatory objectives to be achieved. This means that there must be a shift, wherever practicable, from rules-based, process-driven regulation to regulation which is goals-based.

Unnecessary regulatory overheads create a wedge between the gross and net returns on investment and raise the hurdle rate for investment in productive assets. This is economically inefficient because the value to society (the gross return on investment) is higher than the return to the business (the net return, accounting for the regulatory compliance overhead). The actual rate of investment in productive assets will therefore be unnecessarily low, with a reduction in the number of investable opportunities and company managers forced to forgo otherwise profitable investments due to regulatory costs.

Highly prescriptive regulation is often a clumsy tool for achieving policy objectives and may have unintended and damaging consequences. Uncertainty about regulatory requirements can discourage investment, particularly in infrastructure or in other areas where there are high sunk costs and the pay-off is over a long period. The observation by the IEA (2021) – that appropriate regulatory frameworks are required if the large increase in private investment needed to support the low carbon transition is to materialise – should be seen in this context.

There are two broad approaches to regulation, as explained by Decker (2018). Taking the right approach is essential if incentives to invest are to be sufficiently strong. At one extreme, there is rules-based regulation which specifies precise requirements for regulated businesses, leaving little room for either ambiguity or discretion. The other approach is goals-based regulation, which sets objectives, principles, or outcomes for businesses, without specifying how these are to be achieved.

The choice has implications for the incentives of businesses, the allocation of risk, and the way regulation is enforced. Ultimately it also has implications for the likelihood of the regulatory objectives being achieved and, importantly, for the cost of achieving them. Critically, which system works best depends on the circumstances of the market that is being regulated. Where significant market change is occurring that requires rapid innovation – just the situation we face now – a goals-based system is likely to be best.

In dynamic markets, regulatory rules often require constant adaptation if they are not to become obsolete and fail to serve their purpose. The emphasis on process in rules-based regulation can lead to box-ticking by firms and create incentives for businesses to game the rules. A defining feature of goals-based regulation is a lack of prescription about process, with goals cast at a high level and compliance requiring a focus on the substantive achievement of the goal. This flexibility allows businesses to innovate and seek better and more cost-effective ways of achieving the goal. That allows business to minimise regulatory compliance overheads while still meeting regulatory objectives. And that, in turn, means that goals-based regulation will not only be more effective, but also help to support the higher investment in productive assets that is urgently needed.

Approach 2: engaged capital

The second way we propose to raise the rate of investment is based on changing the relationship between financial investors and the companies they invest in. The key to this is a shift, from transactional capital to what we call engaged capital.

Many company managers have become overly focused on managing quarterly earnings announcements to support the stock price and provide a regular flow of dividends to financial investors. This is holding them back from undertaking productive, value-enhancing investments. These investments are not only beneficial to shareholders with a sufficiently long horizon, but also critical to the wellbeing and ultimately the stability of society at large.

Engaged capital involves a partnership between financial investors and company managers, in which both adopt a long horizon and focus on maximising sustainable value. It requires patience, tolerance of risk, and financial investment at a sufficient scale. If the relationship

is a good one, then it allows company managers to make sound decisions to invest in productive assets in the pursuit of long-term value.

The problem at the moment is that the majority of financial investment is not in the form of engaged capital. Instead, it is all too often in the form of passive funds which track indices and which take a relatively hands-off approach to company management; or it is in the form of transactional capital deployed by traders who are focused on technical factors rather than the fundamentals that create long-term value.

Informed and committed financial investors who provide engaged capital are more able than anonymous traders or passive investors to encourage company managers to focus on long-term value. Providers of engaged capital, who through analysis and dialogue understand and support – where merited – the strategy of a company, are more likely to see through short-term fluctuations in share prices. They are also more likely to see long-term growth opportunities arising from pandemic-related disruption.

Policymakers and financial investors need to work together to encourage engaged capital and investment in productive assets. Policymakers, including financial market regulators, should assess the impact that their policies have on the incentives for financial investors to build relationships with company managers and provide engaged capital. Practices that inhibit engaged capital and which make it more costly for investors to provide, should be justified based on other public policy objectives or removed.

Larger and more concentrated shareholdings are a necessary condition for engaged capital. These are more prevalent in continental European countries, partly due to the importance of family-owned businesses. Unnecessary barriers to more concentrated shareholdings need to be removed, while still protecting minority shareholders.

The need for patience, scale and tolerance of risk means engaged capital is not naturally a fit for individual retail investors, so policymakers should create frameworks to allow the long-term savings of retail investors to be collectively channelled into engaged capital.

Policymakers should also reconsider the merits of continuously promoting liquidity through increased trading volumes and market depth. This may encourage high-turnover trading strategies and transactional capital at the expense of engaged capital.

Financial investors also have a critical role to play. They should ask themselves what their investment can build, not just what it can buy. To provide engaged capital they should identify and reassess existing practices that inhibit this. In particular, they should consider how fund managers or company managers are rewarded and the impact of dividends and share buybacks on incentives to undertake productive investments.

**Imperative for action**

We have identified four reasons why more investment in productive assets is critically important at this moment in time and two approaches that should be pursued to achieve this outcome. The challenge is both urgent and of fundamental importance to the health of the

global economy and for social stability. Increasing investment in productive assets – as opposed to the ever-increasing financialisaton of the economy – is essential if high levels of real growth and improvements in living standards are to be restored and then sustained.

Policymakers are right to be concerned about inflation and the risks that this poses to our economies. But they must not let their efforts to reduce inflation exacerbate the problems of underinvestment. It is imperative that they should pursue the goal of higher investment alongside controlling inflation. We believe that goals-based regulation and engaged capital are key to this and that now is the time to act.

**References**

Anayi, L., J.M. Barrero, N. Bloom, P. Bunn, S. Davis, J. Leather, B. Meyer, M. Oikonomou, E. Mihaylov, P. Mizen, and G. Thwaites (2021), "Labour market reallocation in the wake of Covid-19", VOXEU.

Anayi, L., N. Bloom, P. Bunn, P. Mizen, G. Thwaites, and C. Young (2021), "Covid-19 and structural change", VOXEU.

Bartsch, E., J. Bolvin and A. Brazier (2022), "A world shaped by supply", Blackrock Investment Institute, January.

BNEF (2021), "New energy outlook 2021", BloombergNEF.

Decker, C. (2018), "Goals-based and rules-based approaches to regulation", BEIS research paper number 8.

Duval, R., Y. Ji, L. Li, M. Oikonomou, C. Pizzinelli, I. Shibata, A. Sozzi and M. Tavares (2022), "Labor market tightness in advanced economies", IMF Staff Discussion Notes, No. 2022/001.

Fischer, S. (2016), "Why are interest rates so low? causes and implications", speech at the Economic Club of New York, New York.

Guerrier, V., G. Lorenzoni, L. Straub, and I. Werning (2021), "Monetary policy in times of structural reallocation, presented to Jackson Hole Economic Policy Symposium.

IEA (2021), "Net zero by 2050", IEA, Paris.

IRENA (2021), "World energy transitions outlook: 1.5°C pathway", International Renewable Energy Agency.

Lenaerts, K., S. Tagliapietra and G.B. Wolff (2021) "How much investment do we need to reach net zero?", Bruegel Blog, 25 August.

Pizzinelli, C. and I. Shibata (2022), "Has COVID-19 induced labor market mismatch? Evidence from the US and the UK", IMF working paper, WP/22/5.