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Six refuted doctrines

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Six refuted doctrines

There are not many opportunities for decisive tests in macroeconomics. Econometric evidence is useful, but time-series data accumulates only slowly (at a rate of four quarterly observation per year) and, in a global economy, observations on different countries cannot necessarily be regarded as independent. Many economic variables are potentially relevant, and many different models and statistical techniques can be applied to any given problem, commonly with differing results. As a result, robust statistical conclusions on contentious macroeconomic issues are hard to find.

Major changes in thought about macroeconomic issues tend to arise, not from the patient accumulation of evidence, but from the experience of economic crises which refute (or seem to refute) established views. Sometimes the effect is to confirm alternative views that are already well-developed, but more often the need for new theoretical developments becomes apparent.

The experience of the Great Depression discredited, almost completely, what Keynes called the Classical view, based on Say's Law, that an economy subject to unemployment would automatically and rapidly return to full employment equilibrium (in the absence of minimum wages or union monopolies). Keynes' (1936), *General Theory of Employment Interest and Money* provided the theoretical basis for an alternative.

Similarly, the stagflation of the late 1960s and early 1970s discredited the school of Keynesian macroeconomic management based on the exploitation of the Phillips curve. Theoretical responses drew on Friedman's (1968) observation of the crucial role of expectations.

The US recession is now a little over a year old, and the global financial crisis it generated about six months old. In such a short time, and with new shocks

occurring almost daily, it is too early to attempt a comprehensive assessment of the impact of the crisis on economic thought. Nevertheless, a number of widely held doctrines concerning economic theory and economic policy have been refuted, or at least rendered highly problematic by the global financial crisis. This paper presents observations on six such doctrines, namely:

#1 The efficient markets hypothesis;

#2 The Great Moderation;

#3: Central bank independence;

#4 Trickle down;

#5 The case for privatisation; and

#6 Individual retirement accounts.

Following the discussion of these doctrines, some concluding thoughts are offered.

1. The efficient (financial) markets hypothesis

Broadly speaking, the efficient markets hypothesis says that the prices generated by financial markets represent the best possible estimate of the values of the underlying assets (Fama 1970).

The hypothesis comes in three forms.

> The weak version (which stands up well, though not perfectly, to empirical testing) says that it is impossible to predict future movements in asset prices on the basis of past movements, in the manner supposedly done by sharemarket chartists. An immediate implication is that prices follow a random walk. While most short-run and medium-run evidence supports the random walk hypothesis, there is some evidence of longer-term reversion to mean values that may violate the weak form of the efficient markets hypothesis. (Poterba and Summers 1988).

The strong version, which gained considerable credence during the financial bubble era says that asset prices represent the best possible estimate taking account of all information, both public and private.[1] Difficult as it is to bury a failed intellectual doctrine, it seems unlikely that the strong form of the efficient markets hypothesis is going to be taken seriously in the foreseeable future, given the magnitude of asset pricing failures revealed by the financial crisis.

For most policy issues, the relevant version of the efficient markets hypothesis is the 'semi-strong' version which says that asset prices are at least as good as any estimate that can be made on the basis of publicly available information. It follows, in the absence of distorting taxes or other market failures that the best way to allocate scarce capital and other resources is to seek to maximise the market value of the associated assets. Another way of presenting the semi-strong efficient markets hypothesis is to say that, regardless of whether markets are perfectly efficient, they are better than any other feasible method of capital allocation.

The efficient markets hypothesis can be tested in various ways. First, it is possible to undertake econometric tests of its predictions. Most obviously, the weak form of the hypothesis precludes the existence of predictable patterns in asset prices (unless predictability is so low that transactions costs exceed the profits that could be gained by trading on them). This test is generally passed, at least with respect to the trading strategies commonly recommend by 'chartists' and 'technical analysts', though anomalies such as mean reversion remain. On the other hand, a number of studies have suggested that the volatility of asset prices is greater than is predicted by semi-strong and strong forms of the hypothesis (Shiller 1989).

While econometric tests can be given a rigorous justification, they are rarely conclusive, since it is usually possible to get somewhat different results with a

[1] It was this claim that lay behind the proposal put forward in 2005 for 'terrorism futures markets', in which participants would bet on the likelihood of terror attacks. (Hansen 2006).

different specification or a different data set. Most people are more likely to form their views on the efficient markets hypothesis on the basis of beliefs about the presence or absence of 'bubbles' in asset prices, that is, periods in which prices move steadily further and further away from underlying values. For those who still believed the efficient markets hypothesis, the recent crisis should have shaken their faith greatly. But, although the consequences were less severe, the 'dotcom' bubble of the late 1990s was, in many respects, a more clear-cut and convincing example of an asset price bubble. Anyone could see, and many said, that this was a bubble, but those, like George Soros, who tried to profit by shortselling lost their money when the bubble lasted longer than expected.

More important than asset markets themselves is their role in the allocation of investment. As Keynes (1936, p. 159) observed, this job is likely to be ill-done when it is a by-product of the activities of a casino. So, if the superficial resemblance of asset markets to gigantic casinos reflects reality, we would expect to see distortions in patterns of savings and investment. The dotcom bubble provides a good example, with around a trillion dollars of investment capital being poured into speculative investments. Some of this was totally dissipated, while much of the remainder was used in a massive, and premature, expansion of the capacity of optical fibre networks[2]. Eventually, most of this 'dark fibre' bandwidth was taken up, but, in investment allocation, timing is just as important as project selection.

The dotcom bubble was just one component of a massive asset price bubble that began in the early 1990s and is only now coming to an end. Throughout this period, patterns of savings and investment made little sense. Household savings plunged to zero and below in a number of developed countries (including nearly all English-speaking countries) and the resulting current account deficits were met by borrowing from rapidly growing countries like China. The standard theory of international finance would suggest that capital flows should go in the

[2] The fraudulent claims of Worldcom played a big role here

other direction. The massive growth of the financial sector itself, which accounted for nearly half of all corporate profits by the end of the bubble, diverted physical and particularly human capital from the production of goods and services.

Finally, it is useful to look at the actual operations of the financial sector. Even the strongest advocates of the efficient markets hypothesis would not seek to apply it to, say, the Albanian financial sector in the 1990s, which was little more than a series of Ponzi schemes. They have however, argued that the sophisticated global financial markets of today, with the multiple safeguards of domestic and international financial regulation, private sector ratings agencies and the teams of analysts employed by Wall Street investment banks is not susceptible to such systemic problems, and is capable of correcting them quickly as they arise, without any need for large-scale and intrusive government intervention. Such claims do not seem plausible in the light of the massive failures of all these institutions, and the exposure of Ponzi schemes on a historically unprecedented scale, at the heart of the US financial system.

Once the efficient markets hypothesis is abandoned, it seems likely that markets will do better than governments in planning investments in some cases (those where a good judgement of consumer demand is important, for example) and worse in others (those requiring long-term planning, for example). The logical implication is that a mixed economy will outperform both central planning and laissez faire, as was indeed the experience of the 20th century.

2. The 'Great Moderation'

The 'Great Moderation' is a phrase coined by Bernanke (2004) to describe his interpretation of evidence presented by Blanchard and Simon (2001) showing that the volatility of output had declined over time in the United States and

other developed countries[3]. Blanchard and Simon offered both a different view of the evidence and a different explanation. They said that output volatility declined from the 1950s[4] to the early 2000s, with an interruption in the 1970s and 1980s. However, they note that the data could also be interpreted as having a single structural break in the mid-1980s, and this is the view of the evidence taken by Bernanke.

A variety of explanations have been put forward for the Great Moderation. To the extent that the Moderation has been seen as more than a run of good luck, it has been explained either by improvements in macroeconomic management associated or as result of the benefits of economic liberalism. A popular account was given by Baker (2007):

> Economists are debating the causes of the Great Moderation enthusiastically and, unusually, they are in broad agreement. Good policy has played a part: central banks have got much better at timing interest rate moves to smooth out the curves of economic progress. But the really important reason tells us much more about the best way to manage economies.
>
> It is the liberation of markets and the opening-up of choice that lie at the root of the transformation. The deregulation of financial markets over the Anglo-Saxon world in the 1980s had a damping effect on the fluctuations of the business cycle. These changes gave consumers a vast range of financial instruments (credit cards, home equity loans) that enabled them to match their spending with changes in their incomes over long periods.

On his retirement as a columnist for *The Times* of London, Baker (2009) noted that these claims had proved false and nominated this column as 'my biggest intellectually missed opportunity'.

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[3] This was not true of Japan, where the bubble economy of the 1980s and the ensuing financial crisis resulted in increased volatility compared to the steady growth of earlier periods.

[4] Reliable national accounts were not available before this period. However, output volatility was obviously high in the 1920s and 1930s, so the 'Moderation' hypothesis may be extended to include these decades.

The Great Moderation has vanished with surprising rapidity, though in retrospect its unsustainability has been evident since the late 1990s. The current global recession will generate a substantial increase in the volatility of output. But even if the recession ends by late 2009, as is suggested by some optimistic forecasters, crucial elements of the Great Moderation hypothesis have already been refuted. Over the period of the Great Moderation, all the major components of aggregate output (consumption, investment and public spending) became more stable. By contrast, if a deep recession is avoided in 2009, this will be the result of a massive fiscal stimulus, with a huge increase in public expenditure (net of taxes) offsetting large reductions in private sector demand.

Just as the failure of the efficient markets hypothesis has destroyed much of the theoretical basis of the policy framework dominant in recent decades, the collapse of the Great Moderation has destroyed the pragmatic justification that, whatever the inequities and inefficiencies involved in the process, the shift to economic liberalism since the 1970s delivered sustained prosperity (see the section on Trickle Down). If anything can be salvaged from the current mess, it will be in spite of the policies of recent decades and not because of them.

3. Central bank independence

The idea that central banks can and should act independently of governments is, fairly clearly, inoperative for the duration of the crisis in many countries. The combination of massively increased liquidity provision and large-scale bank bailouts requires close co-ordination between central banks and national treasuries, though the form of this co-ordination is inevitably different in different countries.

But the implications of the crisis for central bank independence go much deeper than this. The idea behind the move to central bank independence was that monetary policy should be left to independent experts, and should be the main tool for macroeconomic stabilisation. Governments were expected to avoid active

fiscal policy, focusing primarily on maintaining budget balance[5]. The shift to independent central banking was closely associated with the adoption (implicit or explicit) of inflation targets as the primary focus of monetary policy, and with interest rates as the primary tool.

Not much of this appears sustainable in the light of the global financial crisis. Inflation targeting failed to prevent unsustainable asset price booms, and it now seems clear that these could not have been prevented without much more direct control over unsound financial innovations. That's a task where interaction between governments and central banks appears unavoidable. On the one hand, expertise is crucial. On the other hand, as with war, financial innovation is too important, and too dangerous, to be left to finance experts.

The idea that monetary policy alone is sufficient for macroeconomic stability might have looked appealing during the Great Moderation, but does not stand up when examined over a longer period. To put it bluntly, central bank independence appears to work well except when it is most needed.

A more difficult question relates to the separation between monetary policy and prudential regulation. The need to take systematic risk into account suggests that monetary policy must be closely integrated with prudential policy. On the other hand, Australia, with a clear separation between monetary and prudential regulators has done better than countries where central banks are more closely involved. Arguably, the correct separation is between strategic issues, such as monitoring of systemic risk and the regulation of financial innovations, which belongs with the central bank, and institution-level supervision, which belongs with a specialist agency.

[5] There were some differences in view as to whether governments should target annual balance, or balance over the course of the macroeconomic cycle.

4. Trickle down

The idea that policies favorable to the wealthy, such as financial deregulation and favorable tax treatment of capital income, will ultimately benefit everybody has been described, pejoratively, as 'trickle down' economics.[6]

Regardless of semantics, 'trickle down' economics is one of the casualties of the financial crisis. Particularly in the United States, the spectacular growth in the share of income accruing to the owners and senior managers of financial enterprise, and to those in the top percentile of the income distribution more generally, has been justified on the basis that all members of the community would eventually benefit from this process.

Now that the economic expansion associated with the 'Great Moderation' is over, it is possible to assess this claim in the light of US experience since the economic crisis of the early 1970s. In this period, US GDP has grown strongly, and the incomes and wealth of the richest Americans has grown spectacularly. By contrast, the gains to households in the middle of the income distribution have been much more modest. Between 1973 (the last year of the long postwar expansion) and 2007, median household income rose from $44 000 to just over $50 000, an annual rate of increase of 0.4 per cent.

Household size has decreased, mainly due to declining birth rates. The most appropriate measure of household size for the purpose of assessing living standards is the number of 'equivalent adults' derived from a formula that takes account of the fact that children cost less to feed and clothe than adults and that two or more adults living together can do so more cheaply than adults in separate households. The average household contained 1.86 equivalent adults in 1974 and 1.68 equivalent adults in 2007 (my calculations on US census data).

[6] The same idea been summed up, more positively, in the aphorism 'a rising tide lifts all boats' a phrase popularised John F Kennedy (1963).Kennedy used the term to defend a dam project against the claim that it represented 'pork barrel' expenditure, and that this phrase is also used in the context of debates over free trade and over the effects of macroeconomic expansion. While it generally implies that we should focus on expanding aggregate income without too much concern over distribution, it is less sharply focused than the 'trickle down' pejorative.

Income per equivalent adult rose at an annual rate of 0.7 per cent over this period.

For those at the bottom of the income distribution, there have been no gains at all. Unlike the situation in Australia and other countries where a poverty line is defined in relative terms, as a proportion of average income, the United States has a poverty line fixed in real terms, and based on an assessment of a minimally acceptable standard of living undertaken in 1963.

The proportion of Americans below this fixed poverty line fell from 25 per cent in the late 1950s to 11 per cent in 1974. Since then it has fluctuated, reaching 12.5 per cent in 2007, a level that is certain to rise as a result of the financial crisis and recession now taking place. Since the poverty line has remained unchanged, this means that the incomes accruing to the poorest 10 per cent of Americans have actually fallen over the last 30 years.

Other measures yield similar conclusions. Median earnings for full-time year-round male workers have not grown since 1974. Women have done a little better, with median earnings for full-time year-round workers rising by about 0.9 per year over this period.

Overall, the main factors sustaining growth in living standards for American households outside the top 20 per cent have been an increase in the labour force participation of women and a decline in household savings. Over the period since 1999, consumption financed by borrowing against home equity has been the main factor offsetting stagnant or declining median household incomes.

Thus, in statistical terms, evidence from the United States offers little support to the trickle down theory. It is equally important, however, to look at how the theory is supposed to work. The general idea is that the more highly owners of capital and highly-skilled managers are rewarded, the more productive they will be. This will lead both to the provision of goods and services at lower cost and to

higher demand for the services of less-skilled workers who will therefore earn higher wages.

The financial sector is the obvious test case for this theory. Incomes in the financial sector have risen more rapidly than in any other part of the economy, and have played a major role in bidding up the incomes of senior managers and professionals in related fields such as law and accounting. According to the trickle-down theory, the growth in income accruing to the financial sector benefitted the US population as a whole in three main ways.

First, the facilitation of takeovers, mergers and buyouts by private equity firms offered the opportunity to increase the efficiency with which capital was used, and the productivity of the economy as a whole.

Second, expanded provision of credit to households allowed higher standards of living to be enjoyed, as households could ride out fluctuations in income, bring forward the benefits of future income growth, and draw on the capital gains associated with rising prices for stocks, real estate and other assets.

Finally, there is the classic 'trickle-down' effect in which the wealth of the financial sector generates demands for luxury goods and services of all kinds, thereby benefitting workers in general, or at least those in cities with high concentrations of financial centre activity such as London and New York.

The bubble years from the early 1990s to 2007 gave some support to all of these claims. Measured US productivity grew strongly in the 1990s, and moderately in the years after 2000. Household consumption also grew strongly, and inequality in consumption was much less than inequality in income or wealth. And, although income growth was weak for most households, rates of unemployment were low, at least by post-1970 standards for most of this period.

Very little of this is likely to survive the financial crisis. At its peak, the financial sector (finance, insurance and real estate) accounted for around 18 per cent of

GDP and a much larger share of GDP growth. With professional and business services included, the total share was over 30 per cent.[7] The finance and business services sector is now contracting, and it is clear that a significant part of the output measured in the bubble years was illusory. Many investments and financial transactions made during this period have already proved disastrous, and many more seem likely to do so in coming years. In the process, the apparent productivity gains generated through the expansion of the financial sector will be lost.

The failure of the trickle-down approach has been even more severe in relation to consumer finance. The idea that increasing income inequality was unimportant when households could borrow to finance growing consumption was never defensible. The gap between income and consumption had to be filled by a massive increase in debt. With sufficiently optimistic assumptions about social mobility (that low-income households were in that state only temporarily) and asset appreciation (that the stagnation of median incomes would be offset by capital gains on houses and other investments) these increases in debt could be made to appear manageable, but once asset prices stopped rising they were shown to be unsustainable.

In the US context, these contradictions have been resolved for individual households by a massive increase in financial breakdowns. Until 2005, this mainly took the form of a steady increase in bankruptcy, to the point where Americans were more likely to go bankrupt than to get divorced. Restrictive reforms introduced at the behest of the credit card industry produced a dramatic drop in bankruptcy rates which was, in part, the lagged counterpart of a massive upsurge in 2003 and 2004 as people rushed to declare bankruptcy under the old

[7] As measured by the ratio of gross FBS output to gross domestic product, which is the figure most relevant to the argument. The value-added in FRB (which nets out inputs purchased by the FRB sector) is smaller, around 20 per cent, but still indicates a highly financialised economy.

rules. From 2006, onwards, bankruptcy rates resumed their upward trend, reaching 1.1 million per year in 2008.

This trend attracted little attention as bankruptcies were rapidly overshadowed by foreclosures on home mortgages. During the boom, when overstretched householders could normally sell at a profit and repay their debts, foreclosures were rare. From 2007 onwards, however, they increased dramatically, initially among low-income 'subprime' borrowers but spreading ever more broadly. 2.3 million houses were affected by foreclosure action in 2008. In hard-hit areas of California, more than 5 per cent of houses went into foreclosure in a single year

As in other respects, the longer-run implications of the crisis have yet to be fully comprehended. Even when economic activity recovers, consumer credit will be far more restricted than in past decades. As a result, there will be no escape from the implications of decades of stagnant wages for workers at the median and below.

Politically, the failure of the trickle-down theory seems likely to produce a resurgence of the class-based politics pronounced dead in the era of economic liberalism. The contrast between the enforced austerity of any recovery period, and the massive, and massively unjustified, excesses of the financial elite during the boom period, will produce a political environment where phrases like "malefactors of great wealth" no longer seem quaint and old fashioned.

5. The case for privatisation

The large-scale privatisation of publicly-owned enterprises both in capitalist countries like the UK and Australia and in formerly communist countries after 1989 played a big role in promoting the kind of triumphalism that characterised much commentary about free-market capitalism, particularly in the 1990s (Friedman 1999, Fukuyama 1992).

The case for privatisation had two main elements. First, there was the fiscal argument for privatisation, namely, that governments could improve their financial position by selling government business enterprises. This argument assumed that privately owned firms would have higher levels of operating efficiency, and therefore that the value of those firms would be increased by privatisation. The second argument was a dynamic one, that the allocation of capital between alternative investments would be improved if governments were not involved in the process. Both of these arguments have been fatally undermined by the collapse of the efficient markets hypothesis.

The fiscal case for privatisation must be assessed on a case by case basis. It will always be true for example that if a public enterprise is operating at a loss, and can be sold off for a positive price with no strings attached, the government's fiscal position will benefit from privatisation. Some early, and unsuccessful, ventures in public ownership, such as the state butcher shops operated in Queensland in the 1920s met this criterion, and there is little interest in repeating such experiments.

For most recent privatisations in developed countries, however, the sale price has been less than plausible estimates of the value of future earnings, discounted at the government bond rate (Quiggin 1994, 2003). The fiscal case for privatisation therefore rests on the claim, derived from the efficient markets hypothesis, that the correct discount rate to use is one based on the private sector cost of capital and therefore dominated by the expected rate of return to equity capital (Domberger 1995).

The choice of discount rate makes a difference because the rate of return to equity has historically been much higher than the rate of interest on government bonds, a gap that can't be explained by standard economic arguments about risk premiums. Although many explanations of this 'equity premium puzzle' have

been offered (Grant and Quiggin 2005), for present purposes they can be divided into two classes

(i) those, such as that of McGrattan and Prescott (2005) which assume that the efficient markets hypothesis is true, and imply that the equity premium is a correct reflection of economic risk, though possibly distorted by government intervention

(ii) those in which the risk premium for equity reflects failures in equity markets that lead people to prefer holding bonds, as discussed by Grant and Quiggin (2003, 2004)

In the light of the global financial crisis and the events leading up to it, the case for explanations of type (ii) is overwhelmingly strong.

The dynamic case for privatisation is based on the idea that the allocation of investment will be better undertaken by private firms than by government business enterprises. This claim in turn relies on the assumption that the evaluation of risk and returns undertaken by investment banks, with the assistance of ratings agencies, and the availability of sophisticated markets for derivatives like CDOs will be far superior than anything that could be obtained by, for example, using engineering calculations of the need for investment in various kinds of infrastructure, and seeking to implement the resulting investment plans on a co-ordinated basis.

The asset revaluations associated with the global financial crisis have shown that, for most of the past decade, market estimates of the relative riskiness and return of alternative investments have been entirely unrelated to reality. In particular, where the decision processes associated with Byzantine corporate structures like that of the Babcock and Brown group, lauded until recently as 'innovative financial engineering, have determined the allocation of investment, the result, has been less than satisfactory.

It should not be necessary to rebut the fallacious claim that, if the case for privatisation developed in the 1980s were invalid, it would be necessary to advocate public ownership of all enterprises. Nevertheless experience of debate on this question suggests that a rebuttal is required.

If the public sector has lower costs of capital, while the private sector has (at least in a wide range of activities) lower operating costs and greater responsiveness to consumer demand, the optimal economic structure will involve public ownership of some firms and private ownership of others, that is, a mixed economy. It is those who argue that the cost-of-capital advantage of publicly owned firms should be disregarded who derive the extreme and paradoxical conclusion that the success of the mixed economy over many decades should be disregarded on the basis of purely theoretical arguments.

6. Individual retirement accounts

The news that, on average, superannuation investments lost nearly 20 per cent of their value last year comes as no surprise, and it is likely that there are plenty of unrealised losses still on the books. While the losses on the stockmarket have been as severe, we can take some comfort in the fact that Australian superannuation funds, like Australian banks, don't seem to be in the same trouble as some of their overseas counterparts. It's natural to ask what, if anything response can and should be done to respond to the decline in superannuation wealth.

In the short term, the answer appears to be, nothing, or very little. Fortunately, for most people the losses are, in a sense, notional, wiping out the spurious gains of previous years. It is only for those at or near retirement that the crash presents an immediate economic problem. Given that the demand for labour is falling sharply, the government may consider an *ex gratia* payment to workers

who choose to retire now. This is a problematic idea, and in normal times, such a proposal would never pass muster, but plainly, the times are not normal.

Looking to the longer view, this is more than a bad year for superannuation funds. The crash and the way it came about undermines the fundamental premise that has driven Australian retirement income policy for the past decade: that allowing individuals, with good financial advice, to make their own investment decisions on the basis of defined contributions from employers to personal accounts, is the best way of financing retirement. The old age pension, in this view, serves as a residual for those who don't manage to save enough.

This privatised approach (also represented in Bush's failed attempt to reform Social Security in the US) is has been largely discredited by the crash. Financial advisers, even the honest ones, have proved to be useless. Lots of investments that were marketed as low-risk have turned out to be little more than junk. Morover, the idea that stocks will always perform better than bonds over the medium term (say a decade) has been proved false. This is a central premise of long-term investment advice.

We need to look again at the alternatives: either a return to employer-based defined benefit schemes, with portability of service, or some kind of national superannuation schemes. In the short term, the call for an increase in the aged pension will also gain strength.

Concluding comments

The global financial crisis will have implications for economic thought going far beyond those described here. The failure of the efficient markets hypothesis will have ramifications throughout economics and finance, and will require a thorough rethinking of the analysis of financial regulation.

The impact on macroeconomics will be equally significant, though much depends on the way in which the crisis is resolved. Given the magnitude of the shock, a

rapid return to normality in 2009, before most stimulus funds have been spent, would provide substantial support for new classical views of the economy as a self-equilibrating system. A recovery beginning in late 2009 or early 2010 would give strong support to advocates of Keynesian stimulus. By contrast, a lengthy depression would cast doubt on both classical and Keynesian views, and might allow for a possible resurgence of heterodox ideas (Marxian, Austrian and post-Keynesian) that have long been marginalised.

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