

Charles A. E. Goodhart and Philipp Erfurth Monetary policy and long-term trends

Book section

Original citation:

Originally published in *Monetary policy and long-term trends*. In: Castañeda, Juan E., Mayes, David G. and Wood, Geoffrey, (eds.) *European Banking Union: Prospects and Challenges*. Routledge international studies in money and banking(85). Routledge, Abingdon, UK, pp. 208-220. ISBN 9781138906501

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Available in LSE Research Online: February 2017

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Monetary Policy and Long-Term Trends

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1. Introduction

The developing economies of the world are still drowning in debt, see Geneva Report, by Buttiglione, et al. (2014). This is especially so in the case of housing finance (Mian and Sufi, 2014). In this Chapter we aim to explain why this has happened, and to suggest how the process of financial intermediation might be reformed to shift such financing more towards equity and away from debt finance, especially in housing. In the course of this exercise we shall focus first on the weakness of labour, as a factor of production, as being a fundamental cause of both recent trends in the economy, i.e. the deficiency of demand and the arrival of deflationary pressures, and also of the, sometimes unavailing, policy effort to counter this by ever more accommodating monetary policy. This has led, since the onset of the Great Financial Crisis (GFC), to a mutually inconsistent set of policies, with ever tighter regulations on banks, causing massive deleveraging (especially in cross-border lending), offsetting unprecedented and unconventional expansionary measures by Central Banks. The result has been a huge expansion of commercial bank deposits at the Central Bank, a blow-out of the bank reserve (R) to deposit ratio (D), R/D , with the banks caught in a liquidity trap, whereby holding such reserves at the Central Bank is currently as attractive as any other usage of such funds. We shall end by suggesting how this trap might be sprung.

But, first, we have to go back to the beginning of our story, which concerns the effects and implications of the weakness of labour, relative to capital, as a factor of production. There has been a long-term downwards trend in the share and strength of labour in national income, which is depressing both demand and inflation: This has prompted ever more expansionary monetary policies. While understandable, indeed appropriate, within a short-term business cycle context, this has exacerbated longer-term trends, increasing inequality and financial distortions. Perhaps the most fundamental problem has been over-reliance on debt finance (leverage).

The recent BIS Annual Report (84th, Basel, June 29), claimed on page 7 that “Understanding the current global economic challenges requires a long-term perspective”, if we hope to find a ‘new compass’ for setting macroeconomic policies. This Chapter aims to provide such a perspective by focusing initially upon one particular trend in developed countries, which is this trend decline in the adjusted wage share as a percentage of GDP in most developed countries since the end of the 1970s. This is shown for four main economies in Figure 1, and for a wider set of countries in Figure 2.

Figure 1
Adjusted Wage Share Declining Across DM

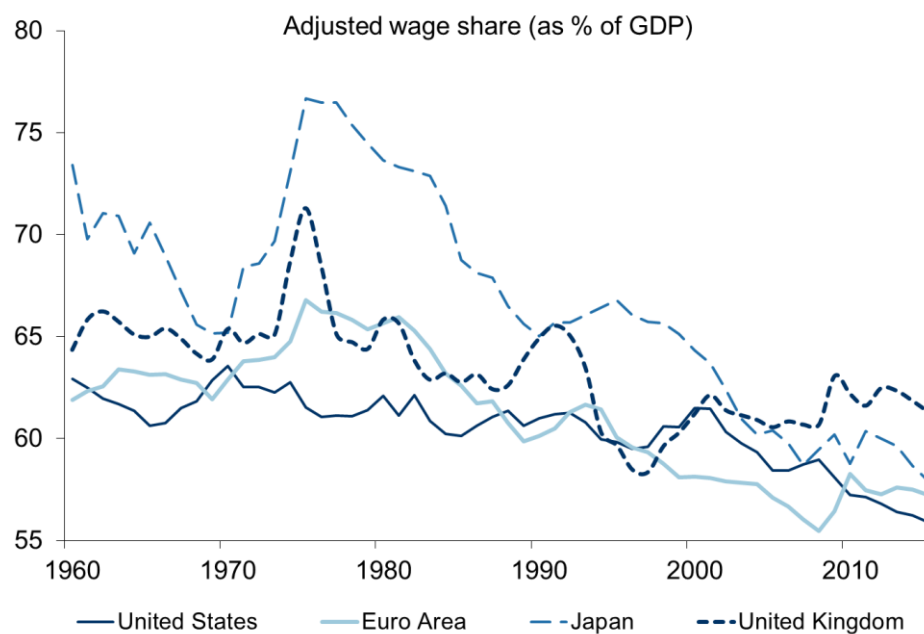


Figure 2

DM Adjusted Wage Shares (as % of GDP)

	1970	1980	1990	2000	2010	2015F
Germany	61.1	63.7	58.8	60.6	57.1	57.9
France	63	66.5	59.3	57.2	58.7	58.2
Italy	65.4	66.6	61.9	53.2	55.4	55.1
Spain	64.2	66.8	61.7	58.9	56.8	52.3
Canada	61	59.3	59.7	56.4	57.4	56.7
Australia	59.8	63.6	59.1	57.1	53.7	56.3
Denmark	60.2	62.3	59.3	56.4	59.5	57.7
Ireland	67.3	70	59.4	48.3	53.2	50.1
Greece	64.8	60.3	62.4	55.6	55	47.1
Norway	58.3	55.2	54	46.6	48.1	49.6
Netherlands	65.2	68.1	61.7	59.6	59.4	60.2

Source: European Commission AMECO database, Morgan Stanley Research

While the rate of decline varies from country to country, it nevertheless appears to be broadly common. This has reflected an initial fall and flattening in the rate of growth of real compensation per employee since the early 1980s, which has been continuing through the ups and downs of the economic cycle, and is again common to most developed countries; it cannot easily be attributed to short-term political or macroeconomic policies. This is shown for a variety of countries in Figure 3, and for a wider set of countries in Figure 4.

It is not our purpose here to try to explain why this has been happening; it is far too complex for us to tackle. Nevertheless, our preferred explanation is globalisation, and in particular the entry of the Asian, especially Chinese, (and also those Eastern European countries formerly part of the communist system) labour force into the world's trading economy. This has allowed businessmen to apply a credible threat of relocating the production of any good, and of most services, to anywhere else in the world, where labour costs are considerably cheaper. This has gone hand in hand with a decline in private sector unionisation almost everywhere, with causation going in both directions, and with a simultaneous decline in inequality between countries at a time when inequality within countries has been rising.

It is certainly possible that technical progress, in the shape for example of IT and robotics, has further weakened the share in output of labour, relative to capital and land (including natural

resources, such as oil), but the measurement of this effect is fraught with difficulties. What we tend not to believe is that there is some immutable law whereby the return to capital must outstrip the overall growth rate of the country ($r > g$), as proposed by T. Piketty in *Capital in the Twenty-First Century*.

2. The Macroeconomic Consequences of a Fall in the Wage Share

Be that as it may, what we do want to focus upon are the macroeconomic consequences of a trend decline in the wage share of GDP, and relatively low real wage growth, relative to returns to capital and land. Workers tend to be poorer, more liquidity-constrained and less likely to aim (or be able) to pass on wealth in inheritance to subsequent generations than the owners of capital and land. Hence they will, as a generality, have a higher (marginal) propensity to consume. So, the trend weakness in returns to labour will simultaneously tend to hold down consumption, output and inflation (see, for example, the paper by Kumhof et al. (2013)).

Figure 3

Real Compensation Growth Weak Across DM

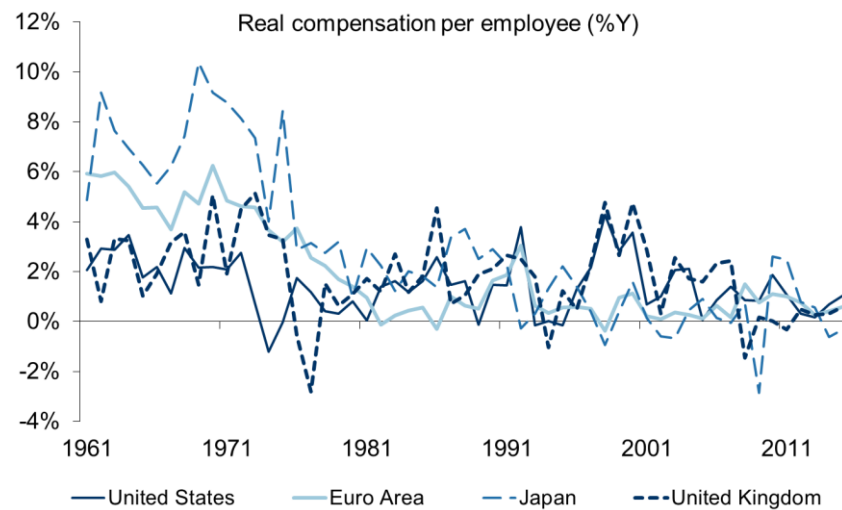


Figure 4

Real Compensation per Employee (avg. annual %)

	1970-80	1980-90	1990-00	2000-10	2010-15
Germany	3.4%	0.5%	1.8%	0.6%	0.2%
France	4.2%	0.8%	1.2%	0.9%	0.5%
Italy	3.6%	1.2%	0.2%	0.7%	-0.1%
Spain	5.7%	1.3%	0.5%	0.6%	0.2%
Canada	0.8%	1.1%	1.2%	0.6%	0.7%
Australia	2.2%	0.4%	1.8%	0.1%	2.8%
Denmark	2.2%	0.4%	1.8%	0.1%	2.8%
Ireland	5.0%	2.3%	1.6%	2.6%	-0.8%
Greece	3.6%	0.0%	0.6%	0.9%	-2.8%
Norway	2.6%	1.9%	1.0%	0.7%	1.1%
Netherlands	3.2%	0.5%	1.2%	1.3%	0.7%

Source: European Commission AMECO database, Morgan Stanley Research

This weakness in consumption and output is likely to lead to some fiscal expansion and rebalancing, whereby welfare and benefits rise, financed by higher taxes on the rich. Whether there is scope for further fiscal expansion, in view of heightened public sector debt ratios and prospective future

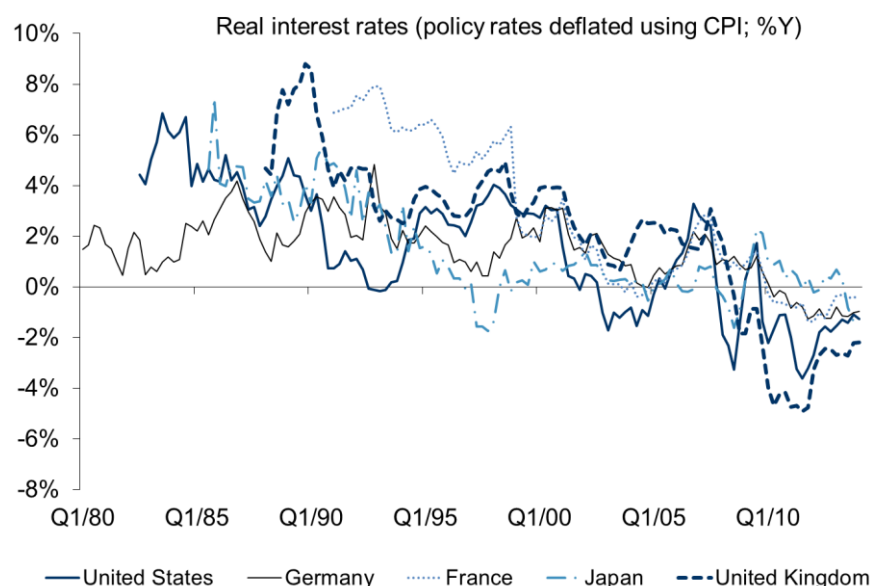
claims on the public purse from an ageing population, and for a more aggressive rebalancing and fiscal redistribution, is yet another major topic that is too large and complex to be tackled here.

What we do instead note is that circumstances in which both real output and inflation are held down compared to target by the relative weakness of labour would seem, superficially, tailor-made to be rectified by expansionary monetary policy. Just as the share of labour has been declining since the 1980s, so has the level of real interest rates. This coincidence of a declining wage share and declining real interest rates is not, we believe, accidental.

From a short-term, business cycle viewpoint, a conjuncture of sluggish output growth and low inflation, surprising on the downside, should be met with and rectified by more expansionary monetary policy. But if one accepts the hypothesis that a (perhaps the) longer-term driver of such a conjuncture is the relative weakness of labour as a factor of production, then this short-term response is unhelpful, indeed somewhat counterproductive, in a longer-term context. Its main effect is to raise asset prices, and the relative value of land and capital, and thus benefit their owners, who are rich, rather than workers, who are poor. Hence, the trickle-down effect via the added consumption of the beneficiaries will be muted. More private sector capex would most likely benefit workers, e.g., by raising productivity and shifting the K/L ratio, but, alas, the empirical evidence shows capex to be notably interest-insensitive. Meanwhile, public sector investment is constrained by a variety of other factors, much to the dismay of Keynesians. What we are left with is the impact of monetary policy, whether conventional or unconventional, on housing and exchange rates. Movements in the latter are a zero-sum game globally; my depreciation is your appreciation.

Figure 5

Real Interest Rates Negative Across DM



This leaves housing. The financing of residential and commercial property has become central to our banking systems in recent decades, whether directly via mortgages, or indirectly via loans to construction companies, loans collateralised on property, etc. And almost all such financing is done in debt form. The failure to reform housing financing modalities in the aftermath of the Great Financial Crisis has been a missed opportunity, indeed a tragedy.

The decline in (long-term) real interest rates has been a major factor leading to a rise in housing and property prices, relative to labour incomes. It has, of course, benefitted those already on the housing ladder, the old and the rich. So, affordability has been on a trend decline, though less in the US than elsewhere.

Against this background, the bipartisan political incentive prior to 2008 in the US to encourage more mortgage lending to the poorer, disadvantaged classes was entirely understandable. But it ended in the sub-prime crisis. Insofar as the main domestic transmission route of monetary policy to the real economy lies in the housing market, the authorities would appear to be caught in a dilemma. Either they encourage the young, the workers and the poor to take on an unstable and excessive burden of debt, or they pump up all other asset prices further and further for less and less effect on the real economy, with a potentially growing risk of some future (disorderly?) reversal.

The current mantra is to constrain any incipient overheating and excess indebtedness in the housing market by macro-prudential measures (e.g., the UK and Sweden), while pressing on with expansionary monetary policies to regain output-inflation targets. This raises several queries. First, will the macro-prudential measures be pressed aggressively enough to work? But if they do, and the housing transmission channel is blocked, may not the resulting effects on other asset prices, including the exchange rate, have to be even more extreme (relative to labour incomes) and hence more distortionary and cause yet greater inequality?

There is, therefore, a longer-term, structural problem with monetary policy: As the BIS Annual Report (op cit) noted on page 18:

“Policy does not lean against the booms but eases aggressively and persistently during busts. This induces a downward bias in interest rates and an upward bias in debt levels, which in turn makes it hard to raise rates without damaging the economy – a debt trap. Systemic financial crises do not become less frequent or intense, private and public debts continue to grow, the economy fails to climb onto a stronger sustainable path, and monetary and fiscal policies run out of ammunition. Over time, policies lose their effectiveness and may end up fostering the very conditions they seek to prevent. In this context, economists speak of ‘time inconsistency’: taken in isolation, policy steps may look compelling but, as a sequence, they lead policymakers astray.”

Whether this is true, yet, also for fiscal policy is a contentious issue, which we shall duck. Let us just state that policies of consciously allowing public sector debt ratios to rise further now are unlikely to prove acceptable in most countries. Having thus argued that expansionary monetary and fiscal policies have both largely ‘shot their bolt’, the BIS argues instead for “balance sheet repair and structural reforms”. Alas, we believe that its positive proposals are much less compelling than its criticisms of existing policies.

Whereas structural reforms and deleveraging are beneficial in the longer term, almost by definition, they are much easier to achieve during periods of fast growth, rather than the current sluggish expansion. Moreover, structural reform commonly involves removing the monopolistic rents of protected sectors, and thus initially is deflationary, prior to the subsequent expansion of output and productivity. The longer the stagnation, the more difficult it may be politically to introduce supply-side reforms, such as cutting subsidies. Absent specifics, and there are virtually none in the BIS Annual Report, a call for more structural reform and delevering is akin to an appeal to a *deus ex machina*.

3. Improving the Form of Housing Finance

A better proposal is to be found in the book by Mian and Sufi, *House of Debt*, especially Chapter 12. The GFC primarily impacted the poor, especially those subject to foreclosure, whereas the countervailing expansionary monetary policy mainly benefitted the rich, thereby worsening the longer-term trends already reported earlier in this note.

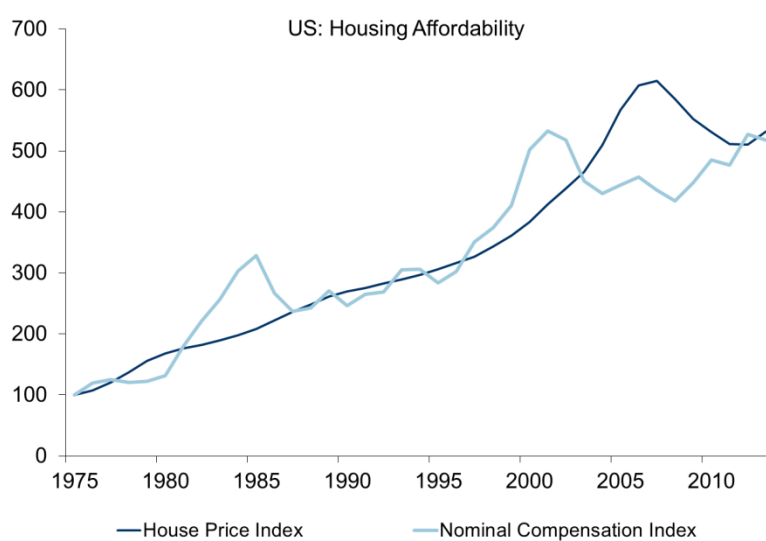
Their solution is for financial intermediaries to offer

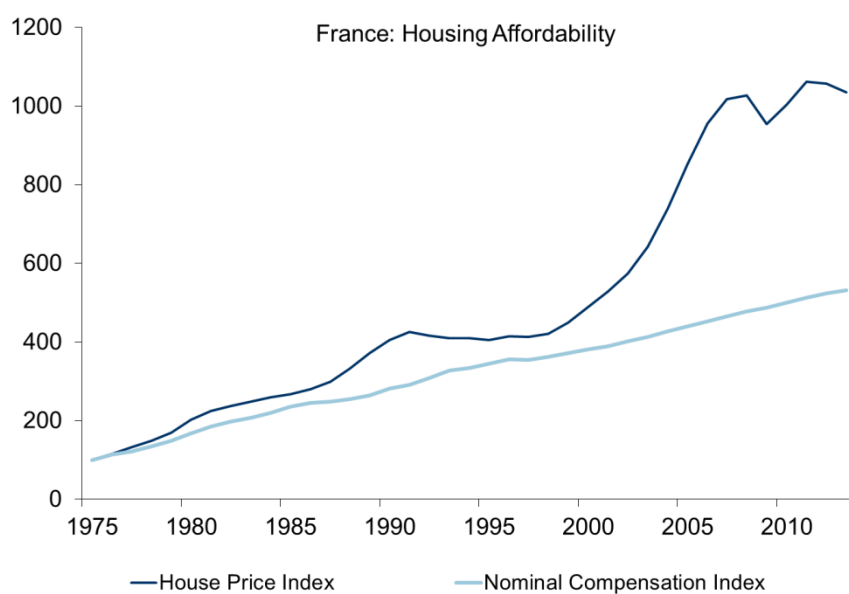
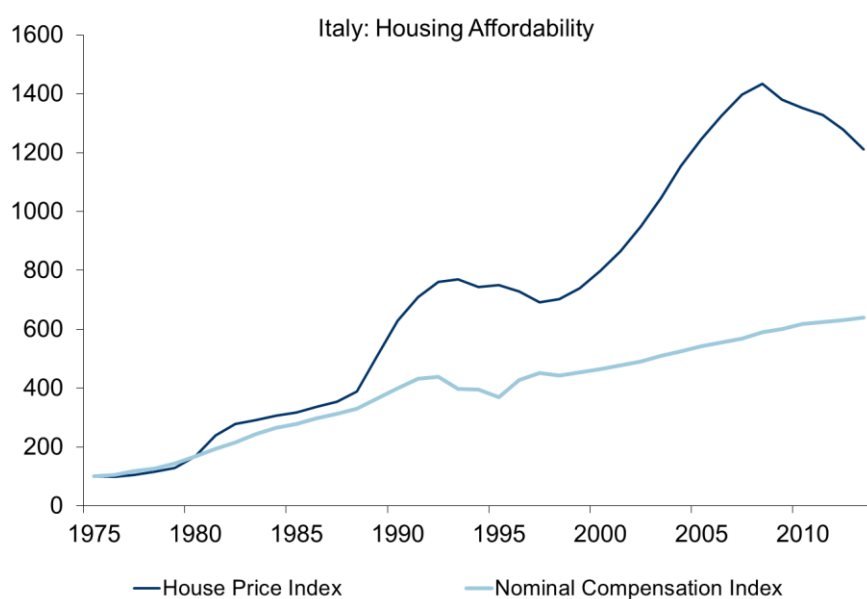
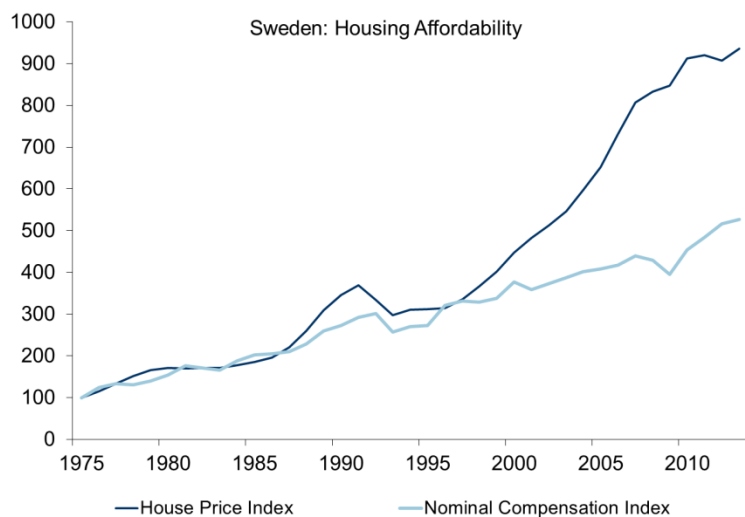
“[A] shared-responsibility mortgage (SRM) [which] has two important differences: (1) the lender offers downside protection to the borrower, and (2) the borrower gives up [a part of his/her] capital gain to the lender on the upside... ”(P.192).

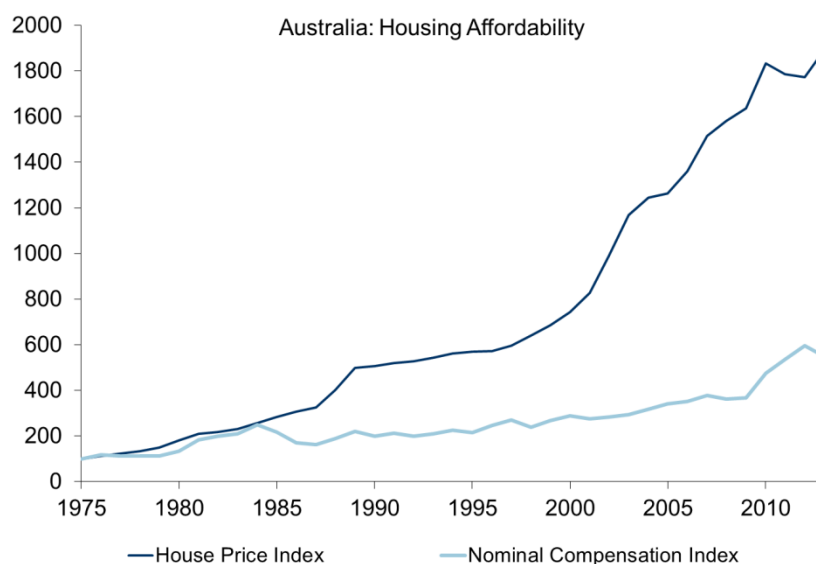
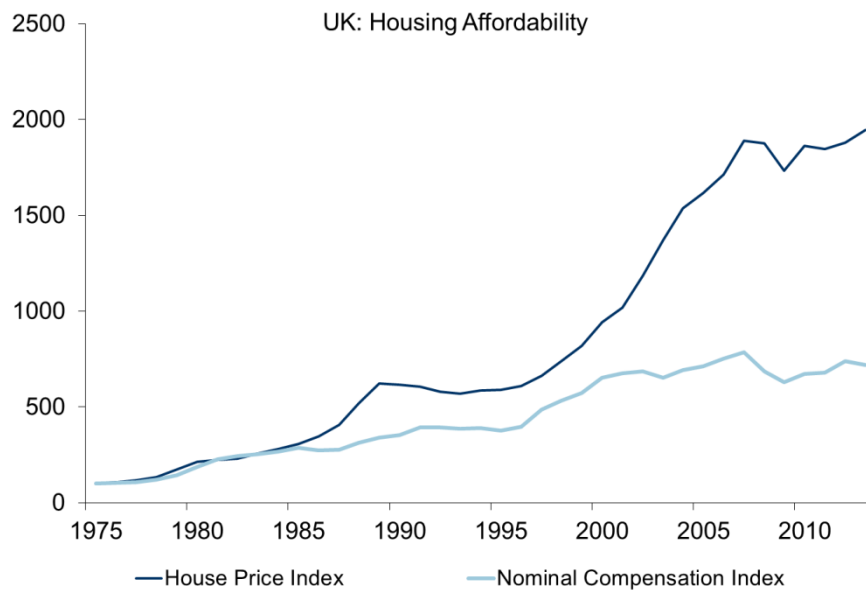
If housing price movements were independently and identically distributed, this would be a perfect solution. Unfortunately, they are not; they are strongly auto-correlated, with long periods of rising prices, sometimes culminating in a frenzy of sharp increases, interspersed with shorter periods of collapses in such prices.

Figure 6

Housing (Un-)Affordability Driven by post-2000 Surge in House Prices







The way that this would work is shown in the box below, which is mainly taken from Mian and Sufi (2014, p. 171-3).

How the SRM Works

The key difference between the SRM and typical mortgage is that the SRM provides downside protection to the owner if house prices fall. The owner's mortgage-payment schedule is linked to some form of local house price index: "For example, if her local house-price index is 100 when she buys the home, and falls by 30 percent by the end of her first year of ownership, [the owner's]

mortgage payment in her second year would decline 30 percent (...) Her amortization schedule would remain the same. As a result, even though she will make a lower payment, her mortgage balance goes down according to the original formula. This in effect means that [the owner] is given an automatic principal reduction when house prices in her area fall below her purchasing level. In our specific example, if [the owner's] house-price index remains at 70 for the remaining twenty-nine years of her mortgage, she will have received a 30 percent forgiveness in principal by the end of her thirty years" (P. 172-173). However, on average, house prices are expected to grow. At some point house prices will again likely exceed the original purchase price. Increasing gradually, once the house price index reaches that original level, the owner will be making full payments again.

The downside protection comes at the expense of the lender, who would therefore charge a fee. To eliminate that, Mian and Sufi suggest: "giving the lender a small share in the upside as well. In particular, an SRM should also provide the lender with a 5 percent share of the capital gain whenever [the owner] sells or refinances her house. The 5 percent capital-gain rule is a small charge for [the owner], especially considering that capital gains on owner-occupied housing are otherwise tax-free". (P. 173-174)

During the upswing, and even perhaps especially in the final frenzy, home buyers may not be keen to share prospective capital gains with lenders, despite the self-insurance advantage. Some tentative attempts to introduce shared-equity mortgages in the UK apparently ran into consumer resistance during the long periods of rising house prices. Some complained that they had not understood the terms of the contract and had been mis-sold.

Perhaps more seriously, would a lender be prepared to offer downside price protection, once the market had begun to crack? At what rate would lenders have offered such protection in, say, Las Vegas in 2008? Given the pattern of auto-correlation on housing prices, we fear that too few mortgage buyers would seek such SRMs in upswings, and that no sellers would offer it, or not at feasible rates, during downswings.

Nevertheless we think that the idea of greater (self) insurance via a larger equity element in the housing market is good. This was a key feature of the Help to Buy equity loan, which has now been extended to 2020. It should be possible to build on this. For example, the government could decree that all house purchases had to have at least, say, a 30% equity share, of which a minimum of 5% would have to belong to the purchasers, though both such numbers are, at this point, somewhat arbitrary and would need much more careful analysis in any practical application. Insofar as

purchasers were unable to reach the 30% level themselves, they could either purchase an SRM in the market, or go to the government for equity funding. Of course, during downturns, the authorities would then be landed with almost all such housing finance, but: i) This would be strongly counter-cyclical; ii) It would be politically (more) popular (than bank bail-out); and iii) Given all that we know about the housing market, it should be long-term profitable for taxpayers. The media has, in general, been critical of the UK government's Help to Buy equity loan scheme, but supportive of aggressively expansionary monetary policy. We reverse the argument: Help to Buy is part of the solution to a long-term structural problem which has been, in part, exacerbated by aggressively expansionary monetary policies.

However, the more fundamental problem is not those policies, but the financing context in which they operate, which gives advantages to debt over equity financing. The most egregious is the relative tax advantage of debt finance, and the 'Holy Grail' would be to equalise, or even shift, such advantages to the benefit of equity finance. Moreover, in a world with massive existing debt overhang, the transition to a much higher equity ratio can be very painful to existing shareholders, usually including top management, who are in a position to block any such move.

Among such changes to a more equity-financed world could be a change in the pattern of government finance: Thus, a move towards nominal income bonds should help to make government finance less pro-cyclical, with less austerity during deflation and less temptation for Ministers of Finance to raid surpluses during booms. Of course, there are problems of revisions, and even falsification, to data, but these could be handled.

4. Reforming the Structure of Financial Intermediation

It is not only the form of housing finance that needs reform, but also the structure of financial intermediation through which such finance is provided. As Jordà, Schularick and Taylor have demonstrated, (2014/15), it is the rapid growth of lending on real estate, both on housing and on commercial property, that has led bank loans to expand much faster than bank deposits in recent decades, since the 1970s. That funding gap was filled, until 2009, by increasing reliance on wholesale funding, mostly short-term, uninsured and provided by informed and flighty investors, (see Schularick and Taylor, 2009). As Adair Turner has noted (2013), banks changed from providing (short-term) finance for business to making much longer term (mortgage) loans to households. This

led to enhanced maturity mismatch and excessive leverage, and took banking away from its traditional role and functions.

So long as housing prices remained strong, the system was stable, since the property was by itself good collateral for the original loan; similarly all financial markets that were derivative of the housing market, such as CMOs, remained liquid and accessible. But once the housing market should begin to weaken, the system became fragile, though the extent of fragility depended on a variety of other factors, such as whether the mortgage loans were made on a recourse, or non-recourse, basis, the initial loan to value (LTV) or loan to income (LTI) ratio, the ease of foreclosure by the lender, etc., etc. That fragility was evidenced by the frequency whereby financial crises were triggered by collapses in property markets in recent decades; in the UK all three recent crises, 1973-75, 1990-92 and 2007-9, were triggered in this manner. Moreover, the demise of Lehman Bros was caused by unwise investment in a portfolio of housing and property related securities, not by its derivative book.

For reasons that remain unclear, the main subsequent attack on the banking industry has been focussed on the role and functions of investment banking, which, though undoubtedly culpable in several respects, was not primarily responsible for the GFC, while ignoring the role of banking in the provision of property finance which was at the centre of the crisis. Indeed, the separation of universal banks, as proposed by Vickers, into separate investment and retail banking subsidiaries will likely aggravate the tendency for the latter to concentrate on mortgage and property finance.

The need, instead, is to reverse the collapse of the housing finance specialist intermediaries, S&Ls in the USA, Building Societies in the UK, into the arms of the banks. All housing, commercial real estate, and property related lending (with a residual life to maturity greater than, say, one year) should be done by specialist property finance companies, who should not be allowed to offer transactions accounts, or short-term deposit liabilities. There should be a much greater equity element in such mortgage loans (the Mian and Sufi SRMs) balanced by an equally large, or larger, equity ratio in the property finance houses. Such houses would be encouraged to securitise their fixed interest book, preferably in the form of Danish-style covered bonds, but banks would be forbidden to hold such securities unless they had a remaining life of under one year. The aim would be to take banking back to its traditional verities, and to revise a refashioned 'real bills' doctrine, whereby banks deploy their short-term deposit funding to lend on a short-term, self-liquidating basis, or to hold assets that would remain liquid in a crisis.

The shortage of equity, prior to 2008, was, perhaps, most egregious in those banks taking a punt on the property market, e.g. Anglo-Irish, Northern Rock, RBS, etc., but leverage was excessive throughout the banking sector. The calls for much higher equity ratios, e.g. Admati and Hellwig, (2013); Miles, et al, (2013), are correct in principle. But the problem is how to get there. With bank CEOs committed to try to reach some desired level for their banks' Return on Equity (RoE), a weak market for bank equity and a massive existing debt overhang, the incentive for bank management is to meet tougher capital adequacy requirements by deleveraging. With governments all imploring 'their own banks' to maintain domestic lending, such deleveraging has had an especially severe effect on cross-border lending.

The results have not been pretty, with the macro-economic effects of tougher regulation counteracting the expansionary force of unconventional expansionary monetary policy, and leading to the enormous pile-up of commercial bank deposits at the Central Bank. There are several possible routes to ease this conflict of objectives. One such route would be to try to adjust the incentive structure of management, perhaps along the lines suggested in Goodhart (2014). Another would be to force banks with insufficient equity capital to accept injections of public sector equity, but on terms expected to be highly profitable for the taxpayer and costly for the existing private sector shareholders. Whereas this was successfully done in the USA with TARP (Troubled Asset Recovery Program) and the 2009 (CCAP) stress tests, it was, mistakenly, ruled out elsewhere by the, wildly exaggerated, hue and cry about the evils of bail-out.

So within Europe little has been done to mitigate the restrictive effect of much tougher bank regulation. This has played a role in Europe's continuing stagnation, though the scale of such effect is almost impossible to measure, and highly contentious. Opinions vary widely.

5. Conclusions

There has been a long-term downwards trend in the share and strength of labour in national income, depressing both demand and inflation. This has prompted ever more expansionary monetary policies. While understandable, indeed appropriate, within a short-term business cycle context, this has exacerbated longer-term trends, increasing inequality and financial distortions. Perhaps the most fundamental problem has been over-reliance on debt finance (leverage). We

propose measures, involving government intervention, to raise the share of equity finance in housing markets; such reforms could be extended to other sectors of the economy. Similarly we propose shifting the provision of housing finance from banks back to specialist property finance companies. These, like banks and other financial intermediaries, should hold a much higher equity ratio than heretofore. The problem is how to reach that goal without instigating massive deleveraging, a problem which has not so far been solved in Europe.

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