

THE POLITICAL EFFECTS OF AGEING ON INFLATION

Tim Vlandas

University of Reading

Forthcoming in the Review of European Economic Policy

Abstract

Why do different countries exhibit different inflation rates? Most political economy accounts emphasise the role of ideas and institutions: as innovations in economics show that low inflation is achievable at no economic cost, governments delegate monetary policy to independent central banks. Countries with independent central banks and unions that anticipate the consequences of their actions by coordinating wage bargaining in turn achieve lower inflation. This conventional wisdom downplays the importance of interests. By contrast, I argue that the power of a growing electoral group – the elderly – has an importance influence on inflation. Because the elderly are politically powerful and inflation averse, countries with more elderly force political parties to adopt more economically orthodox policies when in power. As a result, countries with a larger share of elderly have lower inflation rates. Ageing may therefore lock in a low inflation regime, even when this is not economically desirable.

Keywords: inflation, domestic interests, OECD, ageing, institutions, economic outcomes.

The political economy of inflation rates

What explains variation in inflation rates across time and countries? The conventional wisdom in the political economy literature emphasises the role of ideas and institutions. A new dominant economic narrative convinced policy makers that pursuing low inflation was essentially a 'free lunch': any monetary induced employment gains would resorb over the long run while inflation would be higher.¹ Many governments decided to delegate monetary policy to independent and conservative central banks to ensure that they would resist the temptation to enact policies that would result in long term increases in inflation for short term gains. By tying their hands, delegation ensured that the government's commitment to low inflation was 'credible'.² Countries where employers and employees coordinate their wage bargaining are better able to anticipate that the central bank would punish excessive wage claims, thereby further moderating inflation.

While valuable, these explanations suffer from two problems. Empirically, it is not clear why countries with similar dominant ideas and institutions should continue to exhibit different inflation rates. In 1998, for instance, Greece and Germany had very similar indices of central bank independence, 0.89 and 0.92 respectively, but exhibited drastically different inflation rates. Theoretically, institutional and ideational accounts underplay the role of interests. This is surprising because interests have been shown to matter in other policy domains³ and because institutions and ideas to be viable in the long run need to be sustained by interests.

In this paper, I present a first attempt at paying closer attention to interests in the case of a prominent part of the electorate, the elderly. I argue that the elderly are more inflation averse than the rest of the population because they are indifferent to unemployment but much more concerned about the value of their – often fixed – income from pensions and assets. In turn, political parties in countries with a larger share of elderly are more likely to adopt economically orthodox party manifestos that emphasise price stability. As a result, countries with older populations exhibit higher central bank independence and lower inflation rates.

The paper unfolds as follows. I first briefly review the literature on institutional and ideational determinants of inflation. Next, I discuss how we can bring interests back into the analysis by considering why the share of elderly in a country should affect inflation rates. I then present some basic bivariate evidence that there is a negative association between the share of the elderly and inflation rates across countries. The final section concludes with some broader implications.

The role of institutions and ideas

The current comparative political economy literature seeking to explain inflation rates has tended to emphasise the importance of economic ideas and institutions. First, several authors have emphasised the role of ideas in shifting the consensus away from an activist monetary policy and Keynesian policy paradigm towards monetarism.⁴ As a result, to prevent policy makers from pursuing policies for short term electoral gains that may have adverse inflationary consequences, governments agreed to tie their hands by delegating monetary policy to independent central banks.⁵ This had the added benefits of convincing all actors that the commitment to low inflation was credible.⁶ Thus for instance, joining the European Monetary Union (EMU) raised the political costs of inflation because governments' low inflation commitments would be closely monitored. The problem with the ideational approach is what it leaves unanswered, namely whose ideas dominate policy making and why?

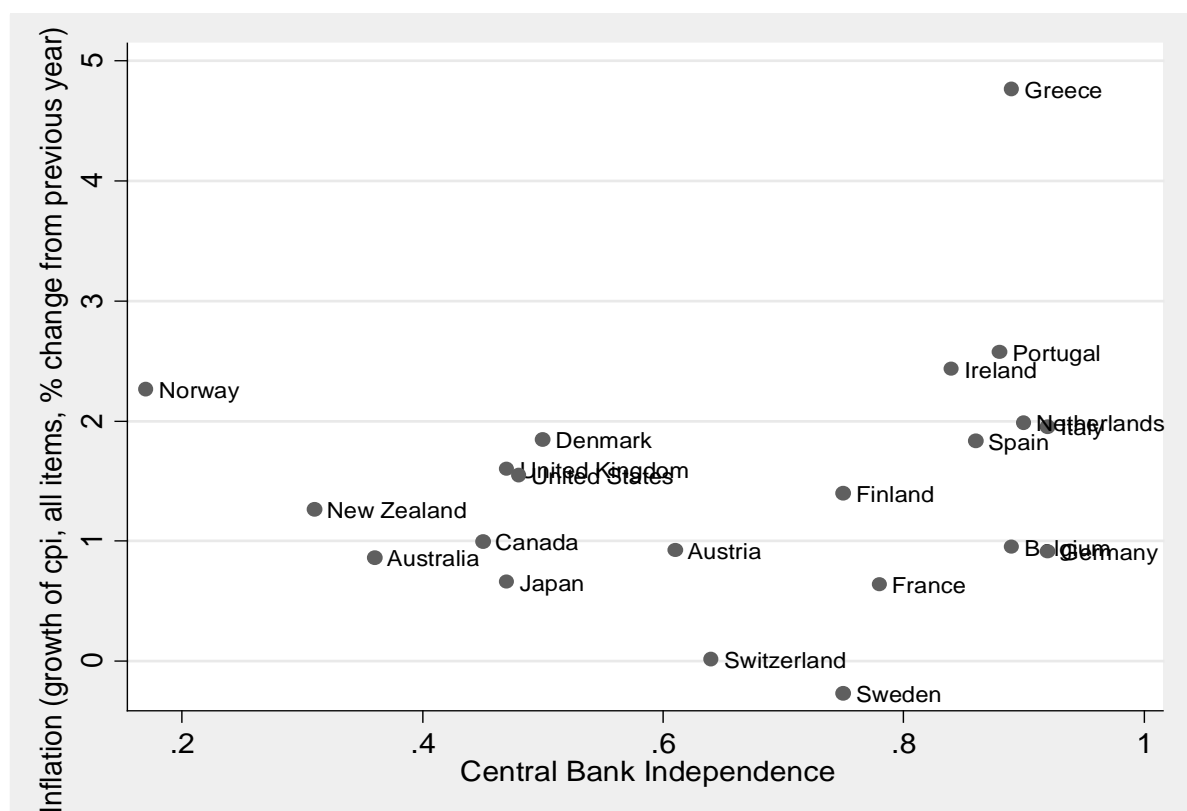
A second approach has focused instead on the role of domestic institutions, and in particular of

independent central banks. Because central banks prefer lower inflation than elected governments, independence should lead to lower inflation⁷.

However, the effect of independent central banks on inflation is contingent on the institutional environment in which employees and employers bargain wages. In countries with highly coordinated wage bargaining, unions would internalise the adverse inflationary effects of their wage claims, and the negative employment consequences that would follow if the monetary policy authority responds by raising interest rates. As a result, highly coordinated unions should behave in a way that would lead to low inflation even in the absence of a conservative policy response by the central bank.⁸

One problem with this literature is that it is difficult to explain which idea prevail with reference only to the idea itself. This is not to say that ideas are not important, but rather to point out that governments are unlikely to completely ignore the preferences of the electorate when choosing which economic institutions to adopt. Another problem is that the variation in institutions – in this case central bank independence – and inflation rates does not suggest a very strong correlation. Thus, for instance, Figure 1 shows that in 1998 - i.e. before the European Central Bank took over monetary policy responsibility from national central banks in Eurozone countries- many soon-to-become members of the European Monetary Union had fairly similar degrees of central bank independence, but nevertheless exhibited several percentage point differences in inflation rates. Conversely, countries with various degree of central bank independence had fairly similar inflation rates. Consistent with this snapshot picture, the bivariate correlation coefficient between inflation and central bank independence in a sample of 21 OECD countries since 1960 is negative and significant (at the 1% level) but not particularly large (-0.16).

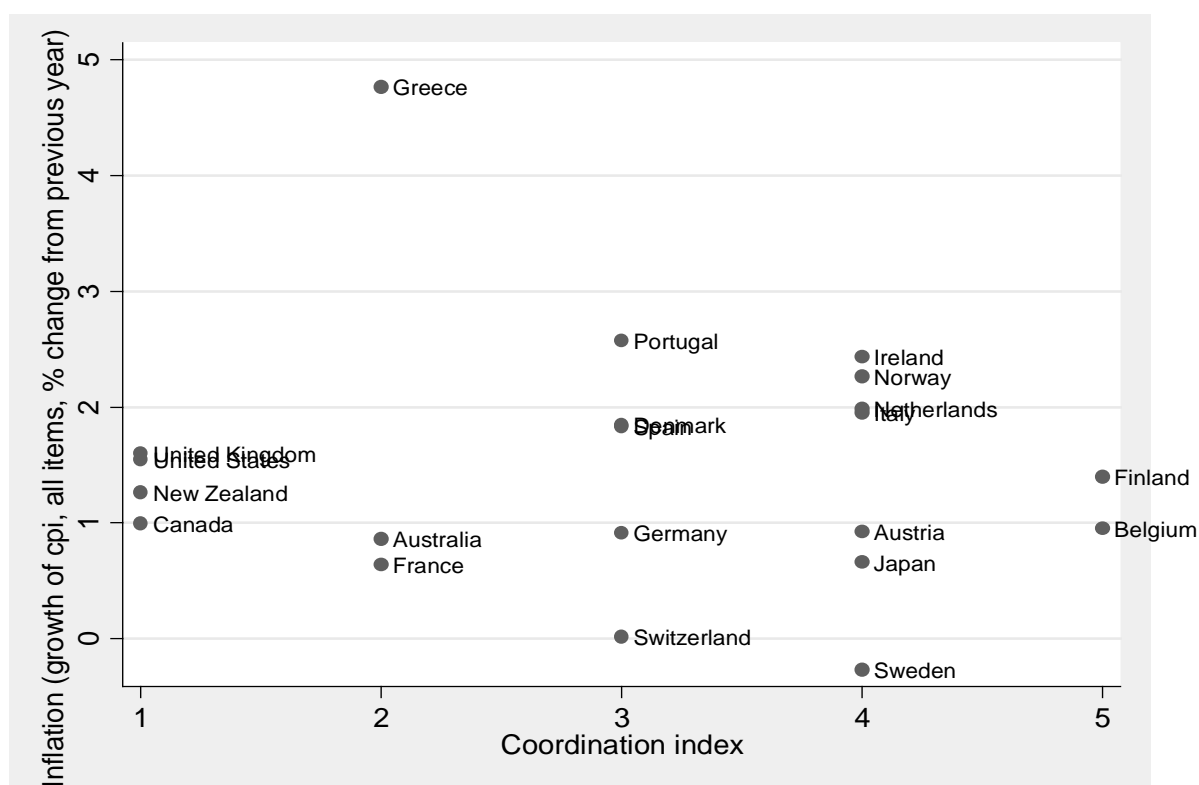
Figure 1: Consumer price index (Y axis) and central bank independence (X axis) in 1998



Moreover, we would expect that countries with sizeable and well-coordinated export sector have both the ability and willingness to keep inflation low to retain their competitive advantage in trade.

Figures 2 and 3 display the relationship between inflation and wage coordination as well as trade openness as % of GDP, respectively, in 1998. We can see that countries ranked as having similar wage coordination have vastly different inflation performance (e.g. Japan, Austria, Sweden, Norway and Ireland) while countries with similar inflation performance (e.g. Finland and the UK, or Japan and France) had different wage coordination indices. The correlation coefficient between inflation and wage coordination in a sample of 21 OECD countries since 1960 is - 0.0187 (non-significant p-value of 0.5435). The picture for trade openness is similarly mixed (Figure 3, year 1998): France and Australia had lower inflation rates than Ireland and the Netherlands despite having much lower levels of trade openness. Belgium and Australia had almost identical inflation rates despite having more than 40 percentage points differences in their export to GDP ratios. The correlation coefficient between inflation and trade openness in a sample of 21 OECD countries since 1960 is -0.1450 (significant p-value of 0.000).

Figure 2: Consumer price index (Y axis) and wage coordination (X axis) in 1998



Bringing interests back in: the case of the elderly

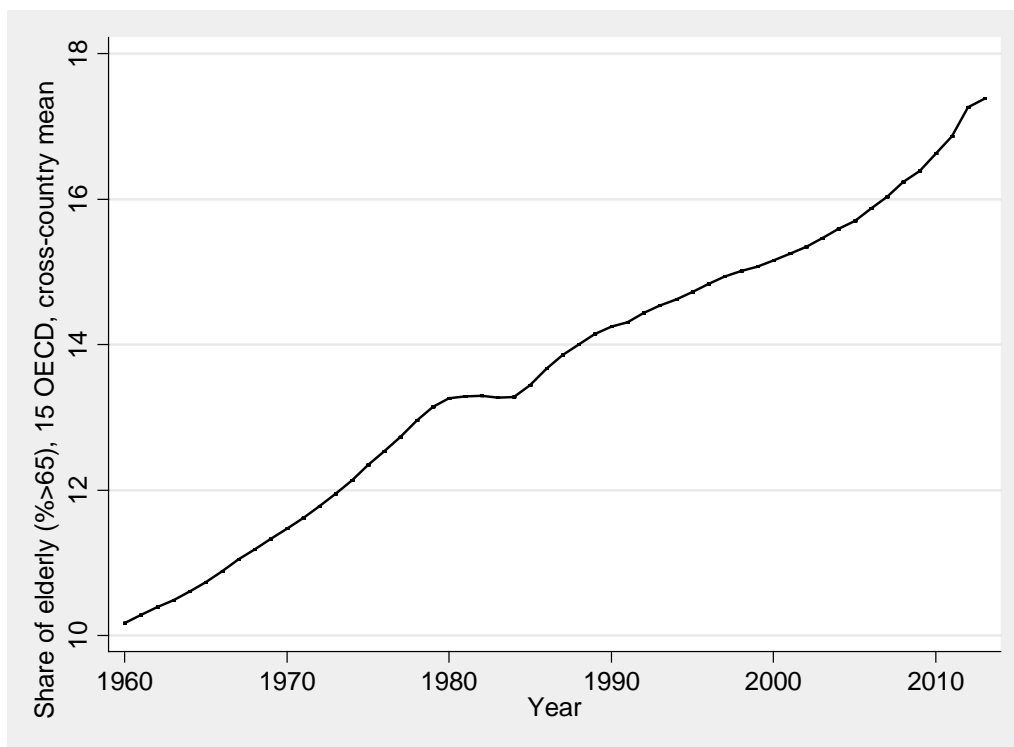
In arguing that interest matter more than is suggested in ideational and institutional literature would suggest, this paper builds on previous interest based accounts. Posen has shown that because the financial sector is inflation averse, governments in countries with more powerful financial actors tend to attribute more importance to price stability and therefore opt for more independent central banks.⁹ Stronger financial actors influence governments either through the discipline of capital markets or by lobbying them. While it calls for a greater attention to the interests being low inflation, the focus of this literature is primarily on interest groups.

In what follows, I would like to explore how electoral politics may also play a role. To the

extent that left and right wing parties have constituents that are differently affected by inflation, the ideology of the governing party should influence inflation. Earlier work by Hibbs indeed suggest that left wing constituents are less inflation averse and that as a result countries with left wing governments will exhibit lower inflation rates.¹⁰ While valuable, this perspective ignores changes in the electorate that affects both left and right wing political parties.

In the last decades, most advanced industrialised democracies have experienced a major change in the demographic makeup of their electorate. The old age dependency ratio, i.e. the share of 65+ over those between 15 and 64, increased from 12.5% in 1950 to 23.8% in 2010. Almost 20% of the population in the Euro area was above 65, and 5% above 80, in 2010.¹¹ As figure 3 below shows, the share of the elderly since 1960 in the OECD has increased by more than 50%.

Figure 3: The share of elderly since 1960 in the OECD



This growing size is important because the elderly may have lower tolerance to inflation because they rely to a greater extent on non-inflation protected income streams. As many countries have reduced the generosity of their defined benefit pension schemes, the elderly increasingly rely on defined contribution schemes and income from assets, which are much less protected from high inflation.

A recent study of aversion to inflation using cross-national survey data finds evidence that corroborates this point. Older individuals are more inflation averse because they “are more likely to have significant nominal assets and/or to rely on fixed incomes”¹². These results hold when controlling for labour market status, ideology, education, income quartile and including country effects.

The elderly are not only more inflation averse, they are also more politically powerful than many other electoral groups. Older people are more likely to vote¹³ and are much more likely to be members of political parties¹⁴. As their numbers increase and voter turnout falls, they represent an increasingly important electoral group for all political parties, which in turn pursue lower inflation.

Ageing brings inflation down

What are the implications of a growing inflation aversion in the electorate for political parties? The Eurobarometer survey¹⁵ asks respondents in all European countries since the 1970s whether they identify inflation as their first or second priority, which makes it possible to calculate the percentage of the population that is concerned about inflation – a proxy for inflation aversion. We can expect that a shift in the electorate's preferences for low inflation will – over time and slowly - be reflected in the policy positions of political parties. It is possible to investigate whether political parties become more inflation averse using the systematic coding of party manifestos in different countries in the same period.¹⁶ A variable labelled 'Economic Orthodoxy' (per414) measures whether the party manifesto emphasises "support for a strong currency", "reduction of budget deficits", and "thrift and savings in the face of economic hardship".

Figure 4 plots economic orthodoxy and average inflation aversion in each decade in a country for which data is available. Because we expect inflation aversion to feed into party position only slowly, inflation aversion is represented in the decade prior to the decade of the average party economic orthodoxy. Consistent with the argument that political parties over time internalise inflation aversion, there is positive relationship between the electorate's inflation aversion and party orthodoxy. As I show elsewhere, a more formal statistical analysis confirms that the share of elderly is positively associated with party orthodoxy when controlling for relevant economic controls.¹⁷

What are the implications for inflation rates? Figure 5 examines the relationship between inflation rates and the share of elderly in the population in 1998. It reveals a much stronger relationship than for central bank independence and wage coordination. This is confirmed by the bivariate correlation coefficient between inflation and the share of elderly in a sample of 21 OECD countries since 1960 which is -0.2797 (significant p-value of 0.000). As I show elsewhere, a more formal statistical analysis on a sample of 21 OECD countries in the period 1960-2012 confirms that the share of elderly is negatively associated with inflation rate when controlling for all relevant controls – for instance: GDP growth, unemployment, wage coordination, trade openness, union density, welfare state spending, and left control of the government.¹⁸

Figure 4: The share of elderly since 1960 in the OECD

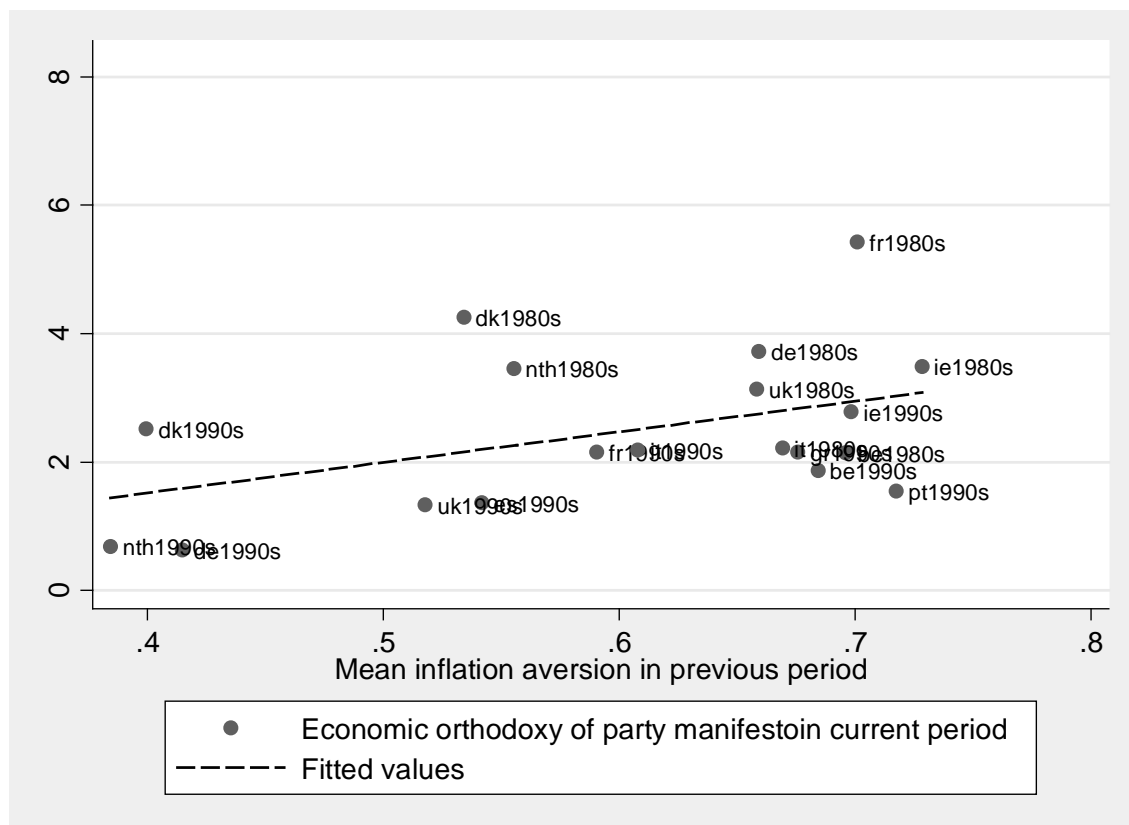
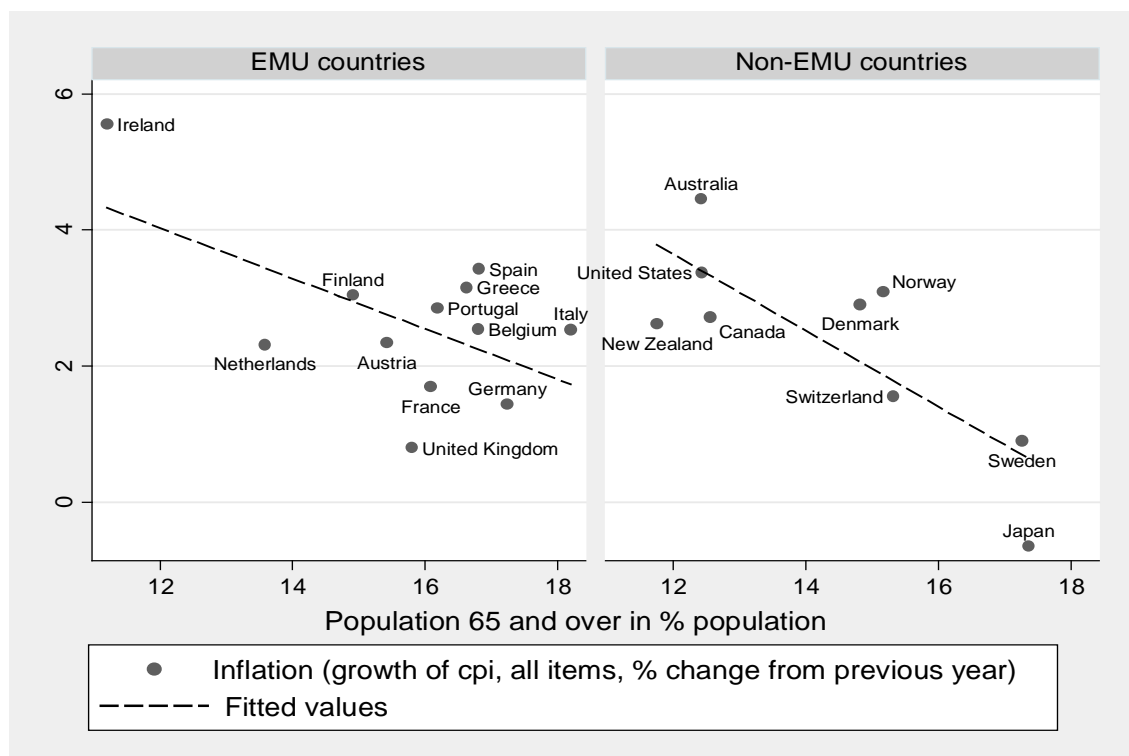


Figure 5: Consumer price index and population over 65 as a share of total population



Responding to possible criticisms

In this section I briefly discuss possible criticisms and counter-arguments.¹⁹ One criticism is that the elderly may either not be inflation averse or not a coherent group. With respect to the latter point, the elderly are indeed much more likely to own their houses, to rely on pensions and not to be in the labour market. These are very important factors influencing preferences, and other political economy have shown that small individual characteristics such as the type of contract in which one works, affects policy preferences.²⁰ There is also clear empirical evidence that the elderly are more inflation averse and this effect holds not just in the 2000s, which could capture a generational rather than life cycle effect, but also in the late 1970s and 1980s.

A second criticism is that the relationship between inflation and elderly operates through an economic rather than political channel. The elderly may have a different consumption behaviour that would in turn feed into lower inflation rates. However, if this were true the relationship between inflation and ageing would hold in both democracies and non-democracies. Yet, this is not the case: the share of the elderly is only negatively associated in democracies (this is shown in Figure 6), whereas the effect is not statistically significant in non-democracies.

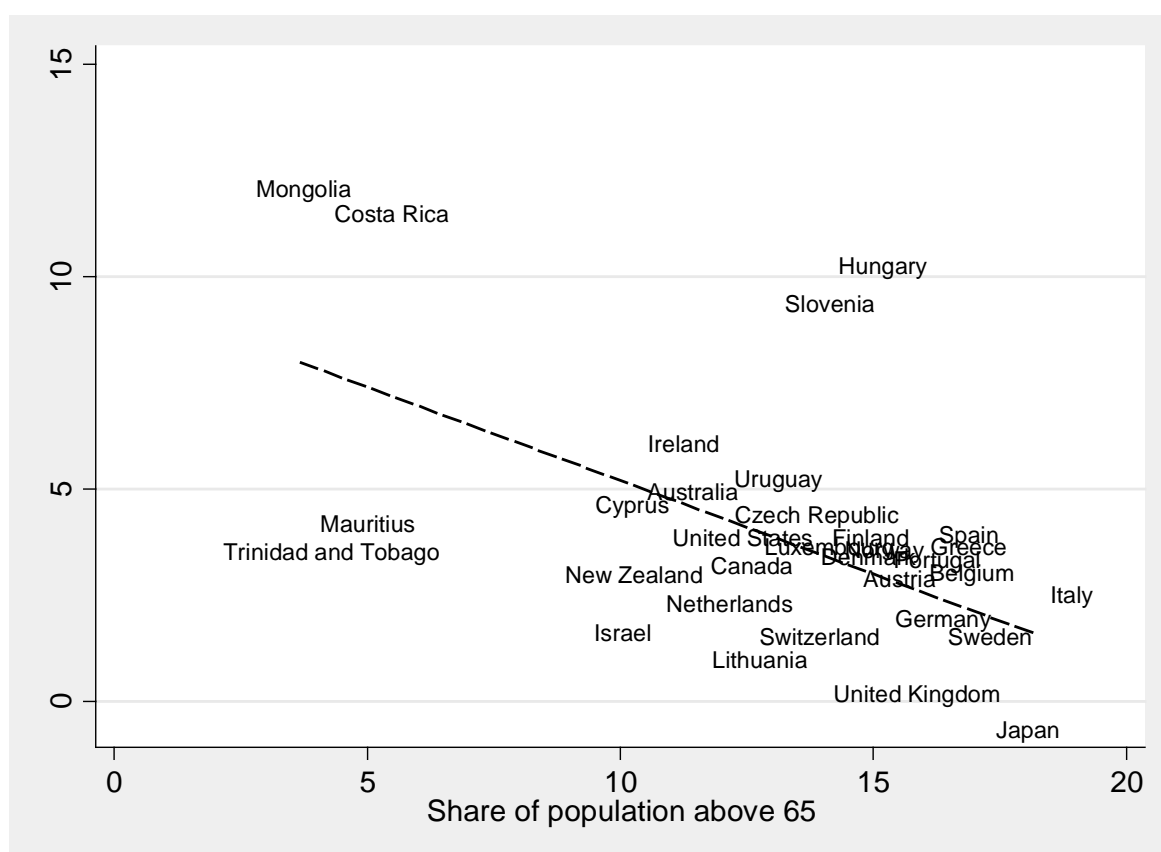
A third criticism is that ageing and inflation are both heavily trended so that the relationship between the two is spurious. However, taking the first difference of inflation or running an error correction model that corrects such risks does not affect my results. If we only analyse the cross-national relationship between inflation and the share of elderly at one point in time, rather than over time, the results still hold.

A fourth criticism is that this analysis overplays the political importance of the share of elderly. However, it is not clear that political parties can sustainably ignore an electoral group that represents in some countries as much as 20% of the population where voter turnout can sometimes be as low as 60%. The 65 years old cut off point I have used in my analysis may underplay the importance of the elderly since those above 50 years old, may be forward looking and anticipate their interests in the near future. This would significantly increase the political salience of ageing.

Another criticism is that ageing occurs when societies modernise and that more developed countries exhibit both low inflation and a large share of elderly. However, if this captured the dynamics at play, we should expect that controlling for GDP per capita and including non-OECD countries in the statistical analysis would wipe out the statistical significance of the share of elderly because of the presumed relationship between GDP per capita and ageing in the aforementioned 'modernisation thesis'. Yet this is not the case: running the same analysis on sample of more than 100 countries shows that not only the effect remains statistically significant when controlling for GDP per capita, but also when excluding all countries with GDP per capita above 20,000\$.

A final criticism may be that it is not clear how political parties once in power affect inflation, especially in a context where central banks are independent. There are several responses to this criticism. First, ageing may itself make it more likely that governments delegate monetary policy to independent central banks and this is indeed what I find. Second, the independence of central banks need to be politically sustained over the long run. Third, governments may influence inflation rates not only through monetary policy but also through fiscal policy, energy policy, industrial policy and by affecting wage bargains (for e.g. through higher minimum wage, the extension of wage bargaining agreements, affecting the reservation wage of different workers through welfare state policies).

Figure 6: Consumer price index and population over 65 as a share of total population in democracies



Concluding comments

In this article, I have made the case for a greater consideration of how electoral politics, and ageing in particular, may shape macroeconomic policy, by taking the case of inflation. While institutions and ideas play a role in explaining inflation, there is scope for including the role of interests in the analysis. I have argued that the elderly are inflation averse and politically powerful. As a result, political parties in countries with more elderly people are increasingly forced to adopt more economically orthodox policies that ultimately lead to lower inflation.

If I am right, ageing may be a – so far missing – piece of the puzzle as to why there was such a consistent and stable shift away from Keynesianism and towards a low inflation monetarist compromise. As societies age, a growing share of the population starts to worry primarily about inflation rather than employment. The electoral cost of neglecting stagnant labour markets and promoting low inflation rates may therefore fall as countries age.

My political economy account may also help explaining why low inflation – and the monetarist ideology that underpins it – remains, even in a context where higher inflation rates may be desirable given the macroeconomic problems that the Eurozone faces. Rather than explaining Germany's focus on low inflation and an austere macroeconomic policy solely through culture or the interest of its export sector, my analytical framework would stress the political power of the growing share of the elderly in the German electoral system.

Further research should therefore extend the analysis of the electoral determinants of inflation rates by considering other powerful political groups among the workforce. The changing inflation

preferences of a coalition of various electoral groups may help explain the shift to monetarism in most industrialised democracies.

Endnotes

¹ Friedman, Milton. 1968. "The role of monetary policy." *American Economic Review* 58, No 1 (March):1–17. Iversen T, Soskice D. ["New Macroeconomics and Political Science"](#). Annual Review of Political Science. 2006.

² Barro, Roberto J., Gordon, David B. 1983. "A positive theory of monetary policy in a natural rate model". *The Journal of Political Economy* 91, No 4 (August):589–610. Giavazzi, Francesco and Marco Pagano. 1988. "The Advantage of Tying One's Hands: EMS Discipline and Central Bank Credibility", *European Economic Review*, 32, 1055-75.

³ E.g. Boix, C. (1998) *Political Parties, Growth, and Equality. Conservative and Social Democratic Strategies in the World Economy*. 1998. New York: Cambridge University Press (Cambridge Studies in Comparative Politics). Rueda, David. 2006. "Social Democracy and Active Labour-Market Policies: Insiders, Outsiders and the Politics of Employment Promotion." *British Journal of Political Science* 36, No. 3: 385-406.

⁴ Friedman, Milton. 1968. "The role of monetary policy." *American Economic Review* 58, No 1 (March):1–17. McNamara, Kathleen R. (1998) *The Currency of Ideas: Monetary Politics in the European Union* (Ithaca: Cornell University Press). Hall, P. (1986) *A. Governing the Economy: The Politics of State Intervention in Britain and France*. Oxford University Press

⁵ Goodman, John B. 1991. "The Politics of Central Bank Independence," *Comparative Politics* 23, No 3 (April):329-349. Clark, Williams Robert. 2003. *Capitalism, Not Globalism: Capital Mobility, Central Bank Independence, and the Political Control of the Economy*. Ann Arbor, MI: The University of Michigan Press.

⁶ Barro, Roberto J., Gordon, David B. 1983. "A positive theory of monetary policy in a natural rate model". *The Journal of Political Economy* 91, No 4 (August):589–610. Giavazzi, Francesco and Marco Pagano. 1988. "The Advantage of Tying One's Hands: EMS Discipline and Central Bank Credibility", *European Economic Review*, 32, 1055-75.

⁷ Rogoff, Kenneth, 1985, "The Optimal Degree of Commitment to an Intermediate Monetary Target," *Quarterly Journal of Economics*, Vol. 100 (November), pp. 1169–90.

⁸ Lange P, Garrett G. 1985. "The politics of growth: strategic interaction and economic performance in the Advanced Industrial Democracies, 1974–1980." *The Journal of Politics* 47 Issue 3:792–82.

Calmfors, Lars, Driffill, John, Honkapohja, Seppo and Giavazzi, Francesco. 1988. "Bargaining structure, corporatism, and macroeconomic performance". *Economic Policy* 3 No. 6 (Apr.):14–61.

⁹ Posen, Adam S. 1995a. "Declarations Are Not Enough: Financial Sector Sources of Central Bank Independence" in Ben S. Bernanke and Julio J. Rotemberg, eds. *NBER Macroeconomics Annual*, Volume 10. Posen, Adam S., 1993. "Why Central Bank Independence Does Not Cause Low Inflation: There is No Institutional Fix for Politics." in R. O'Brien (ed.), *Finance and the International Economy*. Oxford, UK: Oxford University Press. Posen, Adam S. 1995b. "Central bank independence and disinflationary credibility: A missing link?" Federal Reserve Bank of New York Staff Reports 1, May.

¹⁰ Hibbs, Douglas A. Jr. 1977. "Political Parties and Macroeconomic Policy," *The American Political Science Review* 71, No.4 (December): 1467-1487. Hibbs, Douglas A. Jr. 1979. "The Mass Public and Macroeconomic Performance: The Dynamics of Public Opinion Toward Unemployment and Inflation." *American Journal of Political Science* 23, No. 4 (November): 705-731.

¹¹ European Commission. 2014. "The 2015 Ageing Report Underlying Assumptions and Projection Methodologies". Manuscript. Brussels, pp 23.

¹² Schee Scheve, Kenneth. 2004. "Public Inflation Aversion and the Political Economy of Macroeconomic Policymaking." *International Organisation* 58: No 1 (Winter), pp 11.

¹³ Goerres, Achim. 2007. "Why are Older People More Likely to Vote? The Impact of Ageing on Electoral Turnout in Europe." *The British Journal of Politics and International Relations* 9: 90–121.

¹⁴ Goerres, Achim. 2009. *The Political Participation of Older People in Europe: The Greying of Our Democracies*. Basingstoke, UK: Palgrave Macmillan, see chapter 5.

¹⁵ Schmitt, H., Scholz, E., Leim, I., Moschner, M. (2008): *The Mannheim Eurobarometer Trend File 1970-2002* (ed. 2.00). European Commission [Principal investigator]. GESIS Data Archive, Cologne. ZA3521 Data file Version 2.0.1

¹⁶ Volkens, Andrea, Lehmann, Pola, Merz, Nicolas, Regel, Sven, Werner, Annika with Lacewell Onawa Promise, Schultze, Henrike. 2014: *The Manifesto Data Collection*. Manifesto Project (MRG / CMP / MARPOR). Version 2014b. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).

¹⁷ Vlandas, T. (2016) The impact of the elderly on *inflation* rates in developed countries. *LSE 'Europe in Question' Discussion Paper Series*. LEQS Paper No. 107/2016. European Institute, London School of Economics and Political Science.

¹⁸ Vlandas, T. (2016) The impact of the elderly on *inflation* rates in developed countries. *LSE 'Europe in Question' Discussion Paper Series*. LEQS Paper No. 107/2016. European Institute, London School of Economics and Political Science.

¹⁹ The proofs for the points I make in this section can be found in: Vlandas, T. (2016) The impact of the elderly on *inflation* rates in developed countries. *LSE 'Europe in Question' Discussion Paper Series*. LEQS Paper No. 107/2016. European Institute, London School of Economics and Political Science.

²⁰ Rueda, David. 2006. "Social Democracy and Active Labour-Market Policies: Insiders, Outsiders and the Politics of Employment Promotion." *British Journal of Political Science* 36, No. 3: 385-406.