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Tim Vlandas

The Political Effects of Ageing on Inflation

Why do different countries exhibit different inflation rates? Most political economy accounts emphasise the role of ideas and institutions: as economic research shows 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, ignoring the significant influence that a growing electoral group – the elderly – has on inflation. Because the elderly are politically powerful and inflation averse, countries with more elderly citizens force political parties to adopt more economically orthodox policies when in power, resulting in lower inflation rates in those countries. Ageing populations may therefore lock in a low inflation regime, even when this is not economically desirable.

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 opted 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, this ensured that the government's commitment to low inflation was "credible".[2] Countries in which employers and employees coordinate their wage bargaining were 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 levels of central bank independence, 0.89 and 0.92 respectively based on the index described in Cukierman,[3] 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 domains and because institutions and ideas need to be sustained by interests to be viable in the long run.[4]

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

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. Several authors have emphasised the role of ideas in shifting the consensus away from an activist monetary policy and

1 M. Friedman: The role of monetary policy, in: The American Economic Review, Vol. 58, No. 1, 1968, pp. 1-17; T. Iversen, D. Soskice: New Macroeconomics and Political Science, in: Annual Review of Political Science, Vol. 9, 2006, pp. 425-453.

2 R.J. Barro, D.B. Gordon: A positive theory of monetary policy in a natural rate model, in: The Journal of Political Economy, Vol. 91, No. 4, 1983, pp. 589-610; F. Giavazzi, M. Pagano: The Advantage of Tying One's Hands: EMS Discipline and Central Bank Credibility, in: European Economic Review, Vol. 32, No. 5, 1988, pp. 1055-1075.

3 A. Cukierman: Central Bank Strategy, Credibility, and Independence. Theory and Evidence, Cambridge MA 1992, MIT Press. Updated using S. Polillo, M.F. Guillén: Globalization Pressures and the State: The Global Spread of Central Bank Independence, in: American Journal of Sociology, Vol. 110, No. 6, 2005, pp. 1764-1802.

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

Tim Vlandas, University of Reading, UK.

Keynesian policy paradigm towards monetarism.[5] As a result, in order 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.[6] This had the added benefits of convincing all actors that the commitment to low inflation was credible.[7] Thus, for instance, joining the European Economic and Monetary Union (EMU) raised the political costs of inflation because governments' low inflation commitments would be closely monitored. The problem with this ideational approach is what it leaves unanswered, namely whose ideas dominate policy making and why?

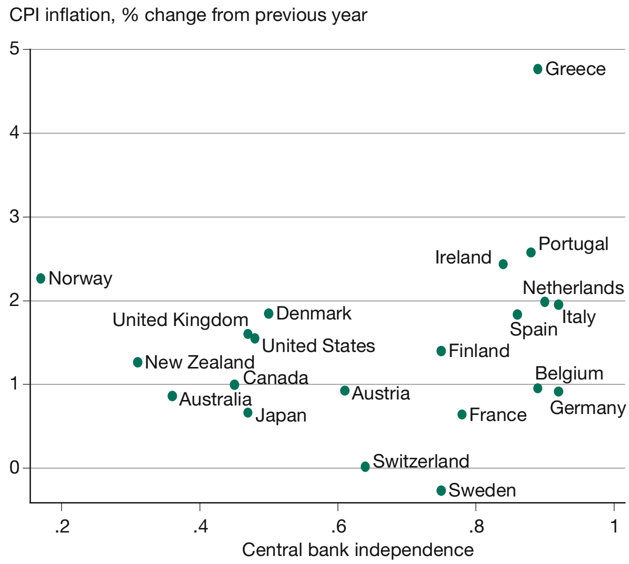
A second approach has focused instead on the role of domestic institutions, and in particular of independent central banks. Because central banks generally prefer lower rates of inflation than elected governments do, independence should lead to lower inflation.[8]

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 responded by raising interest rates. As a result, unions in highly coordinated systems should behave in a way that would lead to low inflation even in the absence of a conservative policy response by the central bank.[9]

One problem with this literature is that it is difficult to explain which idea prevails without examing the prevailing political context. 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 among 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 subsequent EMU members had fairly similar degrees of central bank independence but nevertheless exhibited inflation rate differences of several percentage points. Conversely, countries with various degrees of central bank independence had fairly similar inflation rates. Consistent with this snapshot, 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 one per cent level) but not particularly large (-0.16).

Figure 1

CPI inflation and central bank independence, 1998



Source: A. Cukierman: Central Bank Strategy, Credibility, and Independence. Theory and Evidence, Cambridge MA 1992, MIT Press.

Moreover, we would expect that countries with sizeable export sectors and well-coordinated wage bargaining have both the ability and willingness to keep inflation low to retain their competitive advantage in trade. Figure 2 displays the relationship between inflation and wage coordination in 1998.[10] We can see that countries with similar wage coordination rankings have vastly different inflation

5 M. Friedman, op. cit; K.R. McNamara: The Currency of Ideas: Monetary Politics in the European Union, Ithaca 1999, Cornell University Press; P.A. Hall: Governing the Economy: The Politics of State Intervention in Britain and France, Oxford 1986, Oxford University Press.

6 J.B. Goodman: The Politics of Central Bank Independence, in: Comparative Politics, Vol. 23, No. 3, 1991, pp. 329-349; W.R. Clark: Capitalism, Not Globalism: Capital Mobility, Central Bank Independence, and the Political Control of the Economy, Michigan 2005, The University of Michigan Press.

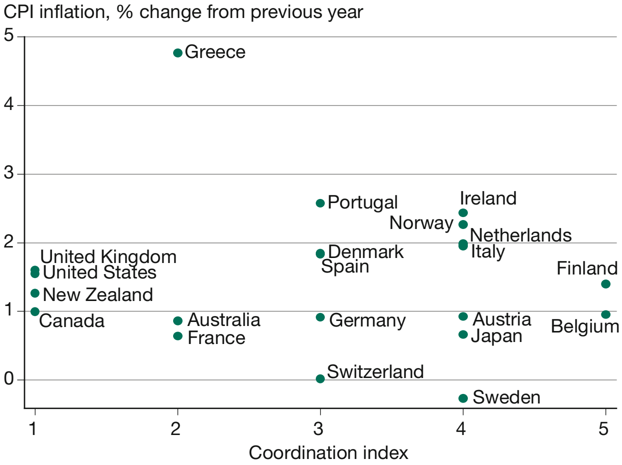
7 R.J. Barro et al., op. cit.; F. Giavazzi, M. Pagano, op. cit.

8 K. Rogoff: The Optimal Degree of Commitment to an Intermediate Monetary Target, in: Quarterly Journal of Economics, Vol. 100, No. 4, 1985, pp. 1169-1190.

9 P. Lange, G. Garrett: The Politics of Growth: Strategic Interaction and Economic Performance in the Advanced Industrial Democracies, 1974-1980, in: The Journal of Politics, Vol. 47, No. 3, 1985, pp. 792-827; L. Calmfors, J. Driffill, S. Honkapohja, F. Giavazzi: Bargaining structure, corporatism, and macroeconomic performance, in: Economic Policy, Vol. 3, No. 6, 1988, pp. 14-61.

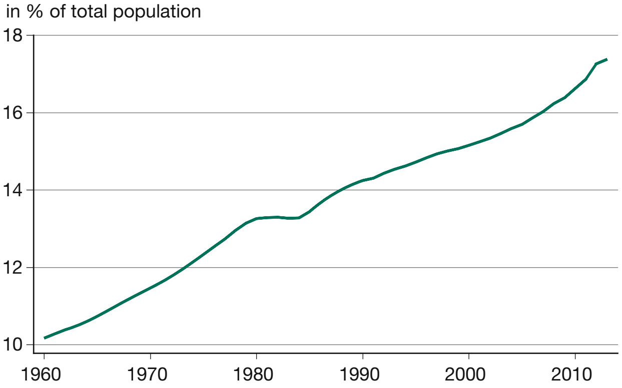
10 The degrees of coordination among different institutions for wage setting was developed by J. Visser: ICTWSS: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 51 countries between 1960 and 2014, version 5.0, Amsterdam Institute for Advanced Labour Studies, October 2015. The scale ranges from 1 (minimum wage coordination) to 5 (maximum wage coordination). We use 1998 data because the euro may have introduced polarizing inflation dynamics within the eurozone.

Figure 2
CPI inflation and wage coordination, 1998



Source: J. Visser: ICTWSS: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 51 countries between 1960 and 2014, version 5.0, Amsterdam Institute for Advanced Labour Studies, October 2015.

Figure 3
Elderly population (> 65), OECD countries, 1960-2015



Note: Cross-country mean of 15 OECD countries.

Source: Author's calculations based on K. Armingeon, C. Isler, L. Knöpfel, D. Weisstanner, S. Engler: Comparative Political Data Set 1960-2013, University of Berne, 2015.

outcomes (e.g. Japan, Austria, Sweden, Norway and Ireland), while countries with similar inflation levels (e.g. Finland and the UK, or Japan and France) had different wage coordination rankings. 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 impact of trade openness is similarly mixed: in 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 the more than 40 percentage point difference 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).

Bringing interests back in: the case of the elderly

In arguing that interests matter more than is suggested in ideational and institutional literature, 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.[11] Stronger financial actors influence governments either through the discipline of capital markets or by lobbying them. While such findings are interesting, the focus of this literature is primarily on interest groups.

In what follows, it is explored how electoral politics may also play a role. To the extent that left-wing 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 suggests that left-wing constituents are less inflation averse and that, as a result, countries with left-wing governments will exhibit higher inflation rates.[12] While valuable, this perspective ignores changes in the electorate that affect both left-wing and right-wing political parties, which is what this paper explores by focusing on the elderly.

In the last decades, most advanced industrialised democracies have experienced a major change in the demographic composition of their electorate. The old age dependency ratio in Europe, i.e. the ratio of those 65 and older 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 five per cent above 80, in 2010.[13] As Figure 3 shows, the share of the

11 A.S. Posen: Declarations Are Not Enough: Financial Sector Sources of Central Bank Independence, in: B.S. Bernanke, J.J. Rotemberg (eds.): NBER Macroeconomics Annual 1995, Vol. 10; A.S. Posen: 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 1993, Oxford University Press; A.S. Posen: Central bank independence and disinflationary credibility: A missing link?, in: Federal Reserve Bank of New York Staff Reports No. 1, May 1995.

12 D.A. Hibbs, Jr.: Political Parties and Macroeconomic Policy, in: The American Political Science Review, Vol. 71, No. 4, 1977, pp. 1467-1487; D.A. Hibbs, Jr.: The Mass Public and Macroeconomic Performance: The Dynamics of Public Opinion Toward Unemployment and Inflation, in: American Journal of Political Science, Vol. 23, No. 4, 1979, pp. 705-731.

13 European Commission: The 2015 Ageing Report Underlying Assumptions and Projection Methodologies, Manuscript, Brussels 2014, p. 23.

elderly since 1960 in the OECD has increased by more than seven percentage points.

This growing share of the elderly is important, because the elderly may have a lower tolerance for inflation since they rely to a greater extent on fixed income streams that are not protected from inflation. 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".[14] These results hold when controlling for labour market status, ideology, education and 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 vote[15] and are much more likely to be members of political parties.[16] As their numbers increase and voter turnout falls, they represent an increasingly important electoral group for all political parties, which therefore are incentivised to pursue a platform of lower inflation.

Ageing brings inflation down

Growing inflation aversion among parts of the electorate has important implications for the policies that political parties choose to pursue. The Eurobarometer survey has asked respondents in all European countries since the 1970s whether they identify inflation as their first or second priority,[17] which makes it possible to calculate the percentage of the population that is concerned about inflation. This could therefore serve as 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 in turn possible to investigate whether political parties become more inflation averse using the systematic coding of party manifestos in different countries in the same period.[18] Specifically, 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 for all countries 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 internalise inflation aversion over time, there is a positive relationship between the electorate's inflation aversion and party orthodoxy. As is shown elsewhere, a more formal statistical analysis confirms that the share of the elderly population is positively associated with party orthodoxy when controlling for relevant economic controls.[19]

What are the implications for inflation rates? Figure 5 examines the relationship between inflation rates and the share of the elderly in the population in 2000. It reveals a much stronger negative 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 the inflation rate when controlling for all relevant controls, including GDP growth, unemployment, wage coordination, trade openness, union density, welfare state spending and control of the government by the political left.[20]

Responding to possible criticisms

One criticism of this approach could be that the elderly may not be a coherent group with clearly inflation-averse tendencies. However, the elderly are 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 research has shown that small individual characteristics, such as the type of employment contract, affect policy preferences.[21] There is also clear em-

14 K. Scheve: Public Inflation Aversion and the Political Economy of Macroeconomic Policymaking, in: International Organisation, Vol. 58, No. 1, 2004, p. 11.

15 A. Goerres: Why are Older People More Likely to Vote? The Impact of Ageing on Electoral Turnout in Europe, in: The British Journal of Politics and International Relations, Vol. 9, No. 1, 2007, pp. 90-121.

16 A. Goerres: The Political Participation of Older People in Europe: The Greying of Our Democracies, Basingstoke 2009, Palgrave Macmillan, see chapter 5, pp. 95-121.

17 H. Schmitt, E. Scholz, I. Leim, M. Moschner: 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. 2008.

18 A. Volkens, P. Lehmann, N. Merz, S. Regel, A. Werner, with H. Schultze: The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR), Version 2014b, Wissenschaftszentrum Berlin für Sozialforschung (WZB), 2014.

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

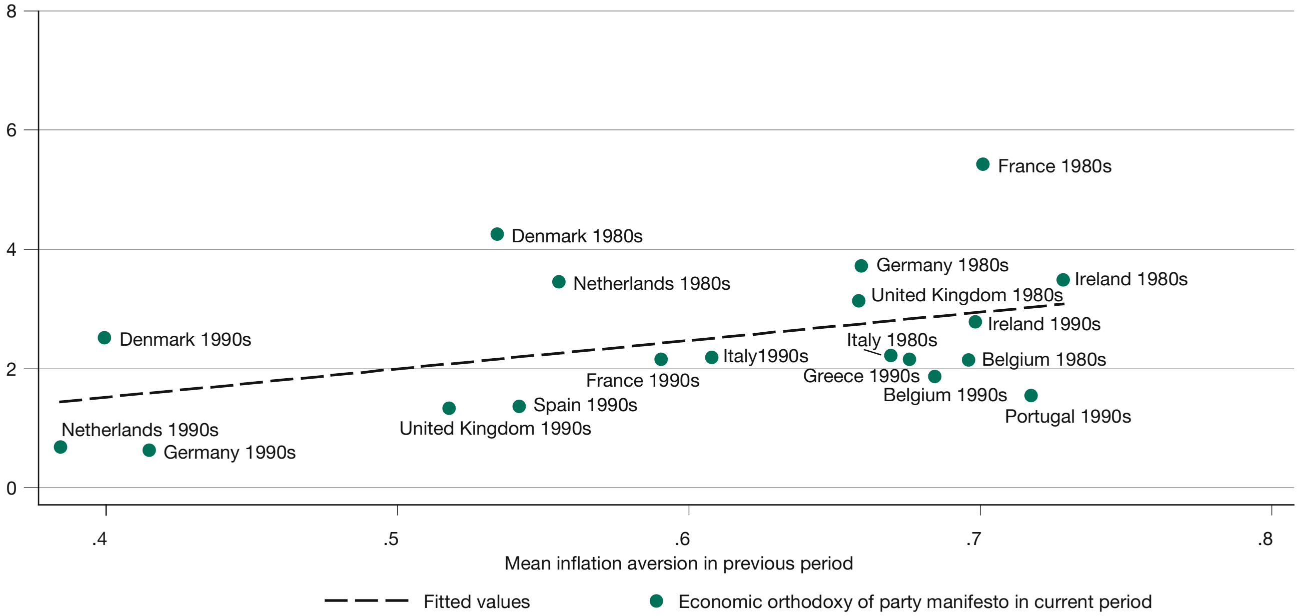
20 Ibid.

21 D. Rueda, op. cit.

Figure 4

Economic orthodoxy and inflation aversion

Manifesto Project scale of policy preferences

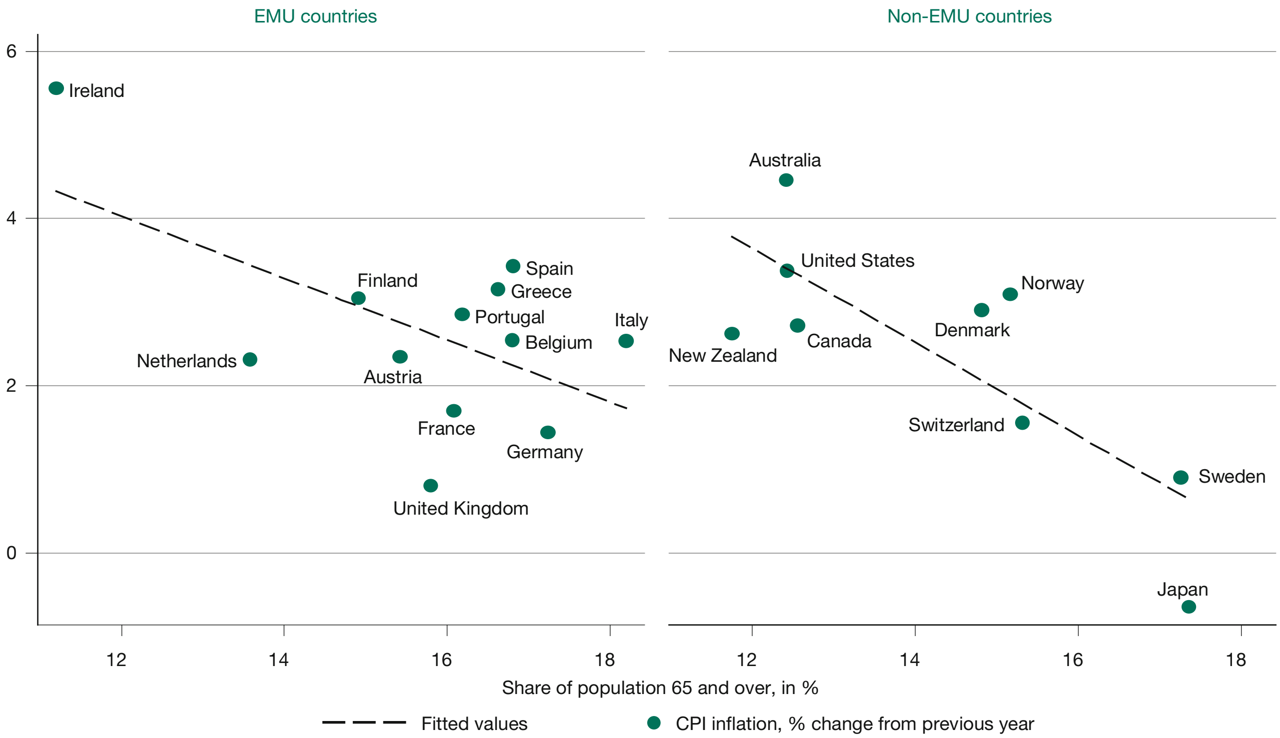


Source: Author's calculations based on A. Volkens, P. Lehmann, T. Matthieß, N. Merz, S. Regel, A. Werner: The Manifesto Data Collection. Manifesto Project, Version 2015a, Wissenschaftszentrum Berlin für Sozialforschung (WZB), 2015; and Eurobarometer: The Mannheim Eurobarometer Trend File 1970 – 2002, Data Set Edition v2.0.1, 2005.

Figure 5

CPI inflation and elderly population as a share of total population

Inflation in %



Source: Author's calculations based on K. Armingeon, C. Isler, L. Knöpfel, D. Weisstanner, S. Engler: Comparative Political Data Set 1960-2013, University of Berne, 2015.

pirical 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.[22]

A second potential criticism is that the relationship between inflation and the elderly operates through an economic rather than a political channel. The elderly may exhibit 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, whereas the effect is not statistically significant in non-democracies.[23]

A third possible 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 the 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 possible criticism is that this analysis overplays the political importance of the elderly. However, it is not clear that political parties can afford to systematically ignore an electoral group that represents as much as 20% of the population in some countries – especially when voter turnout can sometimes be as low as 60%. The 65-year-old cut-off point used in this analysis may underplay the importance of the elderly, since those 50 and older may be forward-looking and anticipate their interests in the near future. This would significantly increase the political salience of ageing.

Another potential criticism is that ageing occurs when societies modernise and that more developed countries exhibit both low inflation and large elderly populations. 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 a sample of more than 100 countries shows that the effect remains statistically significant both when controlling for GDP per capita as well as when excluding all countries with GDP per capita above $20,000.

22 K. Scheve, op. cit.
23 T. Vlandas, op. cit.

A final possible criticism may be that it is not clear how political parties affect inflation once in power, especially in a context in which 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 needs 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 influencing wage moderation (for example through a higher minimum wage, the extension of wage bargaining agreements or by altering the reservation wage of different workers through welfare state policies).

Concluding comments

In this article the case is made for a greater consideration of how electoral politics may shape macroeconomic policy through the example of the effect of the share of elderly on inflation. While institutions and ideas certainly play a role in explaining inflation, I argue that there is scope for including the role of interests in the analysis. Because the elderly are inflation averse and politically powerful, political parties in countries with more elderly people are increasingly forced to adopt more economically orthodox policies that ultimately lead to lower inflation.

If this is correct, ageing may be a – so far missing – piece of the puzzle as to why there has been 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. Consequently, the electoral cost of neglecting stagnant labour markets while prioritising low inflation rates may fall as countries age.

This political economy account may also help explain why low inflation – and the monetarist ideology that underpins it – continues to prevail, even in a context in which higher inflation rates would 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 interests of its export sector, this 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.