Ideology and Redistribution: Left-wing Tax policy 1870-1945

Per F. Andersson*

Stockholm University

August 27, 2023

Abstract

This paper is concerned with ideology and inequality in the late 19th and early 20th century. Traditional political economy models predict left-wing parties to rely less on taxes falling heavily on the poor – such as consumption taxes – and rely more on taxes falling heavily on the rich, such as income taxes. Surprisingly, left-wing governments often rely more on the former than on the latter, but there is no consensus on why. Using a novel dataset on government tax revenue covering 31 countries in Western Europe, both Americas, and Australasia between 1870 and 1945, I find that left-wing governments tax income heavier than consumption in majoritarian democracies, while they tax consumption heavier than income in proportional representation systems. I argue that these patterns can be explained by the left employing different strategies for redistribution depending on the electoral system. In PR, the left relies on a more regressive tax mix than in majoritarian systems.

*Department of Political Science, Stockholm University. Email:per.andersson@statsvet.su.se

> *"A rational limitation of the principle of progressive taxation is not possible. It will develop further, once legally acknowledged, towards the direction in which lie the ideals of socialism"*
>
> – Otto von Bismarck, *Quoted in Kemmerling (2022)*

> *"We see that the demand put forward by the Social-Democrats — the complete abolition of all indirect taxes and their replacement by a real progressive income tax and not one that merely plays at it — is fully realisable"*
>
> – V. I. Lenin, *Pravda, June 7, 1913*

Scholars of inequality have directed attention to what the state can do to affect the distribution of income and wealth in society (Milanovic 2016; Piketty 2014). Some suggest that government policy cannot do much. For instance, Scheidel (2017) argue that only war, civil war, and revolution reduce inequality, and a study going back to the 1960's finds no correlation between democracy and inequality (Acemoglu et al 2010). Indeed, the increase in inequality among rich democracies in the last few decades – and the absence of a strong redistributive response – have sparked a debate about the efficacy of democratic systems of government (e.g., Gilens 2005; Elkjær and Iversen 2022).

Even though left-wing parties are expected to implement more progressive, redistributive, economic policies than centrist and right-wing governments, the empirical evidence has yet to show any clear patterns. Some studies find that left-wing governments redistribute more (Bradley et al. 2003), while others find no correlation between left-wing rule and reduced inequality (Scheve and Stasavage 2016), and even that the left taxes the poor more heavily (Beramendi and Rueda 2007). Moreover, historically it was parties to the right, not to the left, that pioneered modern income taxes (Mares and Queralt 2014). How can we make sense of these seemingly contradictory findings? In this paper I argue that the redistribution actually implemented by left-wing parties depends on the political system in which these parties operate. More specifically, in countries using proportional representation electoral systems, left-wing parties build strong fiscal states – often with a relatively more regressive tax mix – capable of funding redistributive spending programs.

In order to explore this argument, I analyze and quantify the relationship between ideology and fiscal policy in Europe and the Americas from 1870 to 1945. This period is of special interest because this was the last time inequality levels was as high as today. Moreover, this period is also when the first left-wing governments were voted into power, governments which were expected to radically change fiscal policy: away from old trade and consumption taxes towards modern, progressive, income taxes. Progressive income taxes were emphasized already in the *Communist Manifesto*, and early social democratic parties demanded that indirect taxes – falling heavier on the poor – be replaced by direct taxes on income.[1] On the other side of the political spectrum, conservatives such as Bismarck were vehemently opposed to the income tax, arguing that it would lead to socialism.

The period is also important considering that tax systems and welfare state regimes take time to build up and once in place shapes future decisions in these areas (Morgan and Prasad 2009). For instance, the New Deal put the American welfare state on a distinctly new path.

Examining the historical record – using novel tax revenue data from Andersson and Brambor (2019) – Figure 1 above reveals that Bismarck and Lenin were right, but only when the left ruled in countries using majoritarian electoral systems. When the left ruled in countries using proportional representation the tax mix is relatively regressive, dominated by consumption taxes.[2] This finding is striking since it documents a left-wing affinity for consumption taxes (in some places) even before the great expansion of welfare states that occurred post 1945, and before the spread of Value-Added Taxes. Thus, contemporary

[1]Numerous studies have shown that that excises and consumption taxes are regressive while income taxes in general are progressive (e.g., Prasad and Deng (2009); Joumard, Pisu and Bloch (2012), and Blanchet, Chancel and Gethin (2022)). I therefore focus on income, excise, and consumption taxes. Since property taxation includes taxes on land, its distributive effect is not entirely straightforward. Similar indicators of the regressivity/progressivity of taxation are routinely used in related studies focusing on more recent trends in taxation (see Timmons 2005). Because the theoretical expectation is the same for excise and consumption taxes, these are analyzed together, and "consumption" refers to both in the remainder of the paper.

[2]Revenues from taxes on international trade are about the same, revenues from property taxes are slightly higher in PR.

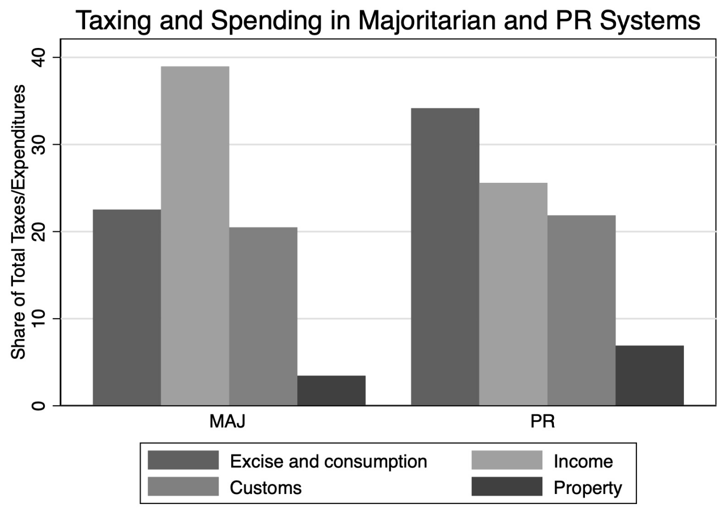


Figure 1: Taxation by the Left, 1870-1945
Source: Andersson and Brambor (2019).

patterns of partisanship and taxation have deep historical roots.

In order to understand the link between partisanship and taxation during this period, we need to answer the question: why do left-wing governments tax differently depending on the electoral system? I find that in practice left-wing tax policy is far from uniform and in fact often goes directly against the expectations of not only Bismarck and Lenin, but also of traditional political economy models. Left-wing governments in democracies using proportional representation (PR) electoral systems rely more on consumption taxes and they tend to spend more on social programs (although this latter link is less robust). In majoritarian countries, the left relies more heavily on income taxes, but does not spend as much on social programs. Looking closer at a number of cases, left-wing tax policy in PR does not seem to be driven by constraints, while there are examples of the left struggling to protect their policies in majoritarian states. In fact, the strong position of the left in PR allows them to use a redistributive strategy based on a relatively regressive – but high-yielding – tax mix combined with progressive transfers.

After reviewing related research below, I outline my argument in section 2. This is followed by a presentation of the historical data sources which I use to describe the patterns of taxation and spending in the first left-wing governments. After that I demonstrate that the key associations between left-wing rule, electoral system, and taxation also hold in a regression framework. To complement the birds-eye view, I zoom in on three cases to explore what policies the governments implemented and why. The final section concludes.

1 Related Research

The most well-known framework for linking ideology and taxation is class struggle. In this view, parties to the left act in the interest of the poor by advocating for progressive taxes on income and wealth (e.g., Cameron 1978; Hibbs 1977). As the franchise is extended in unequal societies, redistribution should logically follow (Meltzer and Richard 1981).[3] Empirically, left-wing rule is associated with lower unemployment, larger governments, more welfare spending, and higher redistribution (Cameron 1978, Cusack 1997, Hibbs 1977, Hicks and Swank 1992, Kittel and Obinger 2003; Bradley et al. 2003).[4]

Empirical studies of economic policy from the post-war era has found that countries with strong left-wing parties tax more regressively. The explanations for why vary from spending pressure (Ganghof 2006) to efforts to increase tax compliance (Timmons 2010*b*), and corporatist constraints (Beramendi and Rueda 2007. Others have explored the link between electoral systems and fiscal outcomes, finding that PR systems are associated with more spending on public goods and transfers (Persson and Tabellini 2003).

While early contributions were interested in the pure effect of parties, few were concerned with how this effect is mediated by formal institutions (Schmidt 1996). Lately, this possibility has been explored by scholars who found that the effect of left parties on the size of government is stronger in more majoritarian countries (Tavits 2004, using Lijpharts (2012) majoritarian/consensus distinction), that the association between partisanship and welfare expenditure is muted by the number of constitutional veto points (Kühner 2010), and

[3] But see Roemer 1998.

[4] Caughey et al 2017 show that there are partisan effects independent of voter preferences.

that the link between parties in power and policy outcome is stronger where the legislature dominates the executive (Cusack and Beramendi 2006).

In sum, research on the post-war era suggests that the reason for why the left sometimes taxes the poor is that they are forced to by outside circumstances, such as constraints from coalition partners or unions, or spending pressure.

While there is a large body of literature concerned with the last decades of the twentieth century, there are few large-n studies on the period before the Second World War. An interesting finding in the historical literature is that left-wing power is not associated with the introduction of income taxes (Aidt and Jensen 2009*b*). Rather, the origins of direct taxation of income is found in non-democratic states (Emmenegger, Leemann and Walter 2020; Mares and Queralt 2015; Andersson 2022*a*). Still, introducing a tax says nothing about the amount being extracted, and early income taxes had low rates. Analyzing revenues in ten western European countries from 1860 to 1938, Aidt and Jensen (2009*a*) find that the left-wing seat share in parliament is associated with less taxing and spending, more revenue from customs, and less from market taxes. On the spending side, some have found that social spending is higher in PR (Iversen and Soskice 2009), while other results suggest the opposite (Aidt, Dutta and Loukoianova 2006).[5] Barnes (2020) links progressive taxation in the pre-WWI era to trade politics, in which support for progressive taxation was exchanged for support on trade policy. Analyzing ten European countries between 1870 and 1913, Barnes finds that when trade interests between elites and labor were close, and when inequality was low, progressive taxation was higher.

However, the historical literature has not provided an explanation for the puzzle of left-wing regressive taxation. In general, this is a symptom of scholars focusing either on the

[5] Another exception is Peter Lindert (2004*a* and 2004*b*) who is concerned with social spending and economic growth from the late nineteenth century and onward. While explicitly ignoring constitutional factors and political parties in his empirical analysis (2004*a*, p. 4 and p. 27), he alludes to the importance of the ability for the left to commit to spending when pushing through regressive taxation, speculating that the left will be less averse to regressive taxation as long as it can commit to generous social programs (2004*b*, p.36 and p. 305). However, Lindert does not elaborate on if and why some left parties can commit to redistributive spending while others cannot.

origins and evolution of taxation, or on social spending. But as recent work has shown, both are needed in order to study how government policy affects inequality (Garfinkel, Rainwater and Smeeding 2006; Blanchet, Chancel and Gethin 2022). Another drawback with most historical studies (both qualitative and quantitative) is that they focus solely on Europe, which is problematic given the unique history of this part of the world.

Despite the importance of historical roots when explaining contemporary variation in tax policy, we still do not have a systematic investigation of the first left-wing governments which took power in the late-nineteenth century. The analysis in this paper begins to fill that gap. I use several new historical datasets to examine the period 1870 to 1945. A period in which modern representative democracy started to spread, new electoral systems emerged, the welfare state started to develop, and left-wing governments took office for the first time.

2 Theory

2.1 Tax Mix

Left-wing governments have the same goals – redistribution – but differ in the way they attain them (through progressive taxation or through progressive spending). Since it is possible to fight inequality with a regressive tax system as long as spending is progressive, there is no contradiction between consumption taxes and redistribution (a point made already by Wicksell and Buchanan).[6] These ideas were not confined to academic writing. For instance, Anthony Crosland of the British Labour party stated that what he called "socialist" taxes "should therefore enable us to consider [...] certain elastic and high yielding indirect taxes [such as] a general turnover tax [...] For what matters is the total progressiveness of the tax system – and, if we want to redress its total imbalance, its total yield" (quoted in Whiting

[6] As Buchanan (1949) puts it, "[t]he statement that progressive taxation will redistribute incomes but that proportional taxation will not implies that benefits are returned to individuals in proportion to incomes and wealth [...] [t]he same amount of redistribution may be as well accomplished by the levy of a sales tax to provide expanded social services as by an increase in the higher-bracket income-tax rates to finance additional defense expenditure" (p. 503).

(2000), p.151).

Moreover, it has been shown that proportional (or even regressive) taxes under certain conditions yield a higher overall revenue, freeing up more resources for spending (Engel, Galetovic and Raddatz 1999). This means that a party seeking to reduce inequality might prefer less progressive taxes if this provides better opportunities to redistribute wealth and income using government expenditures.

It is simiarly mistaken to assume that the right always prefers regressive taxation. For instance, in the post-war era, the right was highly critical of consumption taxation on the grounds that it would increase the size of the state (Andersson 2022*b*). And as mentioned above, income taxes were often introduced by right-wing governments (Mares and Queralt 2015).[7] Thus, there are reasons for the right to support progressive taxation and for the left to expand regressive taxation. A more fruitful starting point is that left-wing parties prefer lower inequality than right-wing parties, and reducing inequality can be done in many different ways, using both taxation and spending.

The combination of an efficient, high-yield tax system and progressive spending is a particularly potent policy for reducing inequality. As I explain in the next section, this strategy is more likely to be employed by the left in PR systems.

2.2 Electoral systems and strategy

A key difference between proportional representation (PR) and majoritarian systems is that PR-elections often lead to coalition governments. Majoritarian elections, in contrast, often result in a one-party government (by design), in which the government is less constrained in its policy choices. Among the countries in my sample that are also covered by the Seki and Williams (2014) dataset, 76% of cabinets in plurality/majoritarian systems were supported by a majority in parliament, compared to 64% among PR countries.[8] These differences have

[7]Emmenegger, Leemann and Walter (2020) documents how direct taxation was expanded by the right in order to pay for public spending from which they would benefit.

[8]Seki and Williams (2014) provide data on 22 of the countries of concern in this paper. Their dataset covers the years 1945 to 2014.

implications for policy. For instance, the United Kingdom, using a single-member district electoral system, has been plagued by large shifts in policy as a result of shifting power between the right and the left (Rogowski 1987, Steinmo 1993).

In PR, left-wing parties are more likely to win power than in majoritarian states. Table 1 below shows that this pattern is present already before World War II, and more pronounced after.[9] If government turnover is lower in PR, the left will be more likely to tax their own supporters since they can credible commit to future spending on this group. In contrast, if there is high partisan turnover, the party in power cannot commit to spending in the future, so abstains from taxing its supporters (Timmons 2010*a*).[10]

Although a left-wing government in a majoritarian system may be able to implement a greater range of policies than a left-wing government in PR, owing to the fact that governments in majoritarian systems have a majority in parliament by design, its decisions are also affected by the future. If they lose the next election, they lose power to an equally powerful right-wing government, free to reverse any policies implemented by the preceding government. In these situations, if both the right and the left have equal electoral strength, cooperation and compromise is possible since both parties can credibly threaten future policy reversals (de Figueiredo 2002). However, if the right has an electoral edge in majoritarian systems – an assumption that is supported by the data in Table 1 – then it is harder for the left to protect current redistributive promises by using threats of future retaliation. Thus, a left-wing government in a majoritarian system knows it will likely lose power, and be out of power for an extended period of time. This implies that short-term considerations and policy insulation is prioritized (ibid.). If the left is more electorally successful in PR, it is

[9] One hypothesized reason for this is the calculation of the middle class: since middle-class voters can trust that center-left coalitions will be sufficiently moderate, they are less likely to vote for the right. Similarly, because promises of moderation are not credible i majoritarian, two-party, systems, the middle class is more likely to vote for the right (Iversen and Soskice 2006).

[10] Majoritarian systems lead to larger swings in power since a small change in votes – in the right districts – can have a substantial impact on policy. Indeed, power changes hands more often in majoritarian countries. In my sample, 80 percent of all the cases of an incumbent party or coalition losing its majority or plurality-dominant position in the legislature to a different party/coalition occurred in majoritarian systems, and 20 percent in proportional representation systems (calculations using information in Coppedge et al. 2020.

more likely to make policy for the long run. This includes building a strong fiscal system – using both income and consumption taxes – which can be used to fund social spending.

This mechanism can be illustrated by an exemple from a different policy area: health care. The British National Health Service is more centralized, redistributive, and rigid than the Swedish health care system, despite the left being stronger in Sweden. The reason, Hicks (2013) argues, is that since the left was weak in the UK, they needed to lock in redistributive policies in order to make it hard for a future right-wing government to reverse them. Left-wing strength in proportional Sweden meant that the implementation of public health care was more focused on efficiency, since distributive fairness could be achieved in other ways. In the same way, regressive taxation is a sign of strength since it implies that left-wing governments focus on building a fiscally strong state rather on short-run distributive aims.

In addition to greater prospects of reelection, there is another advantage for the left in PR-systems: it will have greater opportunities to protect spending programs when in opposition. For instance, committee structures facilitating opposition influence are very common in PR systems while the opposition has very little influence in majoritarian countries (Powell 2000, ch. 2). If political institutions encourage opposition influence, the effect of losing power is reduced since the left can still affect policy in opposition.[11]

To sum up, left-wing governments have historically been (relatively) more successful electorally in PR systems. Thanks to greater opposition influence, the left has greater opportunities to protect policy while out of power in PR. Tax policy-making from a position of (long term) strength leads to a different calculus, focusing on efficiency in the long run and avoiding policy insulation.[12] Regressive taxation can be part of an effort to build revenue capacity in order to finance social programs. Empirically, this means left-wing governments

[11] In Powell's aggregate measure of opposition influence based on bargaining power and committee systems, the average score for PR countries is more than twice that of majoritarian countries (2000, p. 109). Moreover, the electoral system is presumably causally prior to both government bargaining power and parliamentary committee system.

[12] This mirrors earlier historical research which has shown that when the right was making tax policy from a position of strength in authoritarian states, they were willing to impose taxes on themselves (Mares and Queralt 2014; Emmenegger, Leemann and Walter 2020.

in PR should use a relatively more regressive tax mix than left-wing governments in majoritarian systems, but spend more on social programs.

3 Data

The Andersson and Brambor (2019) dataset presents information on central government tax revenues, covering 31 countries from 1800 (or independence) to 2012.[13] To our knowledge, there exists no comprehensive dataset on public finance with a similar historical depth. Even for OECD member states, no cross-national database provides information from the nineteenth century up to today.[14]

Our dataset is based on secondary sources providing partial temporal or geographic coverage. In many cases different sources relied on the same underlying data; in other cases they reported conflicting estimates of revenue yields and the size of the economy. To complement and adjudicate between existing databases, we combined information from these existing datasets with information from country-specific sources.[15]

Total central government tax revenue is disaggregated into direct and indirect taxes. These categories are further disaggregated into income and property taxes (direct taxes), and customs, excises, and consumption taxes (indirect taxes). The main reason we focus on *central* government revenue is that data availability at the local level is very poor in comparison. The dataset is described in more detail in section 7 of the appendix.

Information on social spending is much more sparse. Historically, many social programs were financed locally, and few countries had any social spending before 1880 (Lindert 2004*b*).

[13] The dataset is unbalanced and the countries included are: Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Canada, Chile, Colombia, Denmark, Ecuador, Finland, France, Germany, Ireland, Italy, Japan, Mexico, New Zealand, Norway, Paraguay, Peru, Portugal, Spain, Sweden, Switzerland, The Netherlands, The United Kingdom, The United States, Uruguay, and Venezuela

[14] Previous research using tax revenue data has either used historical data over a small sample of European states – e.g., Mares and Queralt (2015) with information on direct tax revenues from 6 European countries using data from Flora, Kraus and Pfenning (1983) – or a larger sample but from a later period. For instance, Aidt and Jensen (2016) use the MOxLAD (2010) dataset, covering 18 Latin American countries from 1920 to 2000. A substantial part of that data, however, is taken from Mitchell (2007) without adjustment.

[15] The complete list of sources is available in the codebook, available at perfandersson.com/data.

Using information in Flora, Kraus and Pfenning (1983) and Díaz, Lüders and Wagner (2016), I create a variable of social spending as a share of total central spending for 14 countries.[16] The coverage in terms of categories of spending and years vary significantly across countries. Moreover, the sample is heavily biased towards European countries.

The electoral system indicator focuses on the formula translating votes to seats. The main distinction between the systems is whether majority rule or proportional representation (PR) is used. Although there is variation within PR systems, these differences are much smaller than those between PR and majoritarian systems (Rae 1967). Consequently, I combine open and closed list PR into the same category. Since a larger district magnitude is associated with greater proportionality (ibid.), majoritarian countries are defined as single-member districts with majority rule.[17] There are countries that at some time used multi-member districts with majority rule, but since the theoretical expectations regarding this combination is less straightforward, I excluded them from the majoritarian category.[18] This means that the two categories PR and majoritarian are not exhaustive, and there is a third category of mixed and indirect systems. The information on electoral systems is from Colomer (2004).

To measure government ideology I rely on the Heads of Government dataset that codes the ideological orientation of the head of government (left, right, or center) in 33 countries from 1870 to 2012 (Brambor, Lindvall and Stjernquist 2014). The original coding is based on an economic dimension and takes five values: left, right, center, other and none (when there is no head of government). "Left" parties have a strong redistributive platform and include communist, socialist or social democratic parties. "Center" parties are agrarian and social liberal parties. Coded "right" are conservative, market-liberal, Catholic, Christian democratic, and fascist parties. For example in the United Kingdom, the Conservatives

[16] Austria, Belgium, Chile, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland, and the United Kingdom.

[17] In section **??** of the appendix I present results using lower chamber district magnitude instead of electoral system.

[18] While the majority of democracies use some kind of PR or majoritarian system, there are exceptions. For example, Switzerland used an indirect electoral system between 1848 and 1918 and Japan, Italy, and Mexico used a mixed system from 1994, 1993, and 2000, respectively.

are coded "right", the Liberals "center", and Labour "left". For more detailed information regarding coding the reader is referred to Brambor, Lindvall and Stjernquist (2014). Based on this dataset, I extract a variable taking the value one if there is a left head of government and zero otherwise. Important to note is that in some country years there is no viable left party (e.g., post-1945 United States).

This measure is far from perfect. The ideological composition in the cabinet and/or assembly would be more appropriate, but as far as I know there is no dataset that provides this information sufficiently far back in time. It is also important to point out that the head of government is different depending on whether the country is presidential or parliamentarian. How the assembly is elected affects tax policy regardless since even a president in most cases needs support from an elected assembly to implement legislation.

A theoretical scope condition is democracy. I use the dichotomous definition in Boix, Miller and Rosato (2013) to separate democracies from non-democracies.[19]

4 Analysis

In this part of the paper I use the data described above to explore tax policies of democratic left-wing governments from 1870 to 1945. As outlined in section 2, I expect the left to employ different strategies for redistribution depending on electoral system. In PR, I expect left-wing rule to rely on a relatively more regressive tax mix in order to raise revenue for progressive spending. In majoritarian systems, I expect left-wing governments to rely on a more on the progressive income tax.

[19]This measure is based on *both* participation and contestation. Participation is conceptualized as suffrage rights for the majority of the male population and contestation means that the executive is directly or indirectly elected in free and fair elections (Boix, Miller and Rosato 2013).

4.1 Taxation, ideology, and political institutions 1870-1945

The first country to introduce PR was Belgium (in 1899) and in 1915 only four democracies in the dataset used PR. However, by 1930 this number had increased to eleven (compared with only six using a majoritarian system). Similarly, left governments did not appear until the early twentieth century. The first left-wing head of government was José Batlle Ordonez in Uruguay in 1903, and the first left-wing head of governments in *democracies* were Andrew Fisher and Aristide Briand in Australia and France, respectively (both in 1910) (Brambor, Lindvall and Stjernquist 2014).

Table 1 below shows the frequency of left and non-left heads of governments in PR and majoritarian countries in the pre and post-war periods. In the pre-war period, 42 percent of all left-wing head of governments were in majoritarian countries and 58 percent in PR. In the post-war period, only 16 percent of left-wing governments were in majoritarian countries, the rest ruling in PR systems. From the point of view of electoral systems, governments in PR were left-wing in 23 percent of cases before 1945, and 39 percent 1945-2012. In majoritarian countries, 14 percent of head of governments were left-wing before 1945, and 20 percent in the post-war era. One can hardly interpret this as left-wing dominance in PR, but it is clear that left-wing parties do better in PR than in majoritarian systems.[20] The left-wing edge in PR is much more pronounced in the post-war era.

How states financed themselves changed radically during the last two centuries, from relying heavily on taxes on land and international trade in the early 19th century, to relying on income taxes and Value-Added Taxes (VAT) in the late 20th century. The period 1870-1945 saw a decline in property taxes and customs revenue, replaced mainly by income tax revenues. At the end of the period, broad-based consumption taxes became more important, while revenues from excise taxes remained fairly stable (Andersson and Brambor 2019).

[20]Since there is no data on the composition of government coalitions, I focus on the left versus non-left head of government distinction. A center head of government could be leading a coalition between the left and the center, just as a left-wing head of government could be leading a similar coalition. Center heads of government are more common in majoritarian states than in PR 1899-1945 (see appendix).

Table 1: Ideology of Government and Electoral Systems

Ideology of HoG 1899-1945			
	Majoritarian	PR	Total
Left	49	70	119
Non-left	307	239	546
Total	356	309	665

Ideology of HoG 1945-2020			
	Majoritarian	PR	Total
Left	86	463	549
Non-left	331	714	1045
Total	417	1177	1594

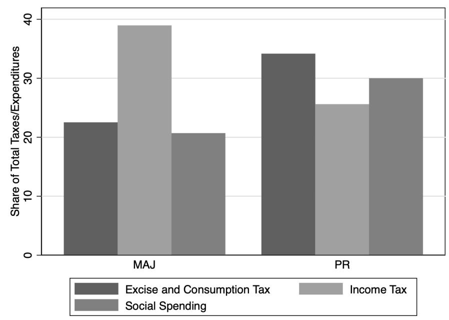
Table 2: Tax Introductions

	PIT	CIT	GST	SSC	INH	VAT
Left in PR	0	4	4	1	0	6
Left in Maj	5	2	2	5	0	1
Non-left	19	22	22	22	13	21

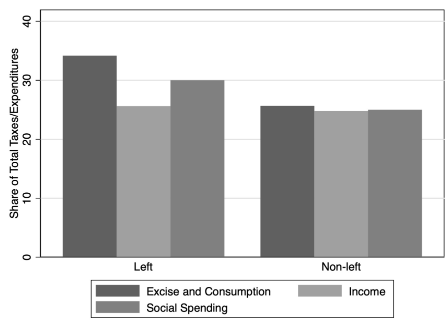
Not only did tax revenues change during this period, new taxes were also introduced. Table 2 below shows the number of tax introductions by electoral system and ideology of government 1800-2012 (using data from Genschel et al. 2019).[21] In general, modern taxes were introduced by non-left governments in majoritarian systems. There were only five cases in the sample of a personal income tax (PIT) being introduced by a left-wing head of government, and all of those occurred in majoritarian countries. Interestingly, the left was more likely to adopt the corporate income tax (CIT) – which falls heavier on the rich than the PIT (Joumard, Pisu and Bloch 2012) – in PR (4 out of 6) than in majoritarian systems (2 out of 6). In contrast, among the six left-wing introductions of a general sales tax (GST) – which is a regressive tax on consumption – four were in PR systems. The pattern is even clearer for the VAT, where six out of the seven left-wing introductions occurred under PR. In my sample, there were no left-wing introductions of inheritance taxes (INH).

Speaking more directly to the theoretical predictions, Figure 2a compares taxation and spending by the left in majoritarian and PR systems. While left-wing governments in ma-

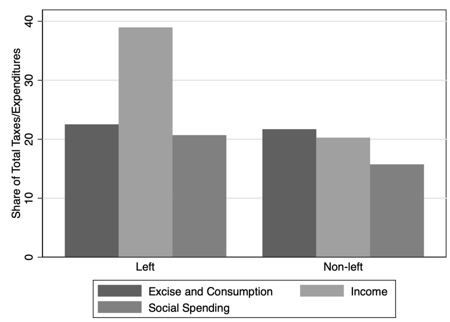
[21] As documented elsewhere, many modern income taxes were introduced by non-democratic governments (Andersson 2022*a*), and often by conservative parties (Mares and Queralt 2015).



(a) Taxation and Spending by the Left, 1870-1945



(b) Proportional Representation



(c) Majoritarian

Figure 2: Taxing and Spending in Proportional and Majoritarian Countries, 1870-1945

joritarian states do rely more on income taxes, they do not spend more on social programs.[22] In fact, the average share of expenditures on social programs is around twenty percent in left-wing governments in majoritarian systems while it is about thirty in PR. So even though the tax mix is more regressive under left-wing rule in PR, social spending is higher. Note that this is before the spread of the modern VAT and before the post-war expansion of welfare states. Interestingly, left-wing governments in PR tax more regressively than non-left governments in PR (Figure 2b), suggesting there is something else going on than coalition partners or opposition pushing policy to the right. It is also interesting to note that there is a starker difference between the ideology of governments than between electoral systems. For instance, non-left governments in both PR and majoritarian systems rely to a very similar degree on income and consumption taxes.

[22]Unsurprisingly, left-wing governments in majoritarian spend more on social programs than non-left governments (Figure 2c).

In section 6.2 of the appendix, I show graphs for all countries that had at least one year with a democratically elected left-wing head of government between 1870 and 1945. A common pattern in the majoritarian countries is that the share of revenue from income taxes is generally higher than the revenue share from consumption taxes. An exception is Spain, with a relatively high share from consumption taxes. However, left-wing rule is associated with a decrease in importance of these regressive taxes. In many countries the share of revenues from income taxes rose quite sharply after the left took power, for instance in New Zealand and the United Kingdom. Also in Chile, left-wing rule was associated with a higher income share.

In PR, left-wing rule is characterized by a higher consumption tax share. For instance in Scandinavia, in which the left were in control for the greater part of the 1930's, the state relied more on consumption taxes than income taxes. Unfortunately, for some cases in this group, data is missing for a significant part of the period, for instance in Portugal and Uruguay. Several countries in this group also suffered a breakdown of democracy, such as Italy and Germany.

4.2 Multivariate analysis

While the patterns in the previous section are suggestive, a more careful analysis is needed to rule out alternative explanations and spurious relationships. Still, the models below are to be interpreted descriptively.

To control for unobserved heterogeneity, all regressions include country-fixed effects. Importantly, this excludes estimation of factors that do not change over time within countries, such as geography. However, since I am interested in the ideological orientation of the government, which does change over time within states, this is not a problem.[23]

As recommended by Beck and Katz (2011), I include a lagged dependent variable to

[23] Among the democracies in the sample, the electoral system changes in only three cases. In section **??** of the appendix, I report results when dropping the linear electoral system term (since it rarely changes over time within country).

alleviate the problem of correlated errors.[24] I also include controls for war (using data from Palmer et al. (2015)), GDP/capita (logged) (with data from Maddison (2007)), the size of government (from Andersson and Brambor (2019)), and presidentialism (using information in Przeworski (2013)). To control for volatility I use the V-Dem dataset to calculate the cumulative number of times the incumbent party or coalition lost its majority or plurality dominance in the legislature to a different party or coalition (Coppedge et al. 2020). As a measure of veto players/constraints, I use the Political Constraints Index (Polcon III) from Henisz (2000). There might be a concern that the non-left parties which are the reference category are significantly different. In particular, Christian Democratic parties might pursue a different redistributive policy than other right-wing parties (e.g., Huber, Ragin and Stephens (1993)). I have included a variable from the HoG-dataset indicating if the head of government in that year was from a religious party. All models include decade dummies to control for common shocks. I have filled in gaps in the dependent variable using linear interpolation.[25]

4.2.1 Results

For income taxes, the multivariate results by and large confirms the exploratory findings: left-wing governments are associated with a larger share of revenues from income taxes in majoritarian states. After controlling for the size of government, the sign and magnitude of the coefficients remain stable across specifications. Calculating marginal effects from Model 4 reveals that the link between left-wing rule and income tax share is negative in PR, but imprecisely estimated (p=.144).

The results for excise and consumption taxes are also encouraging. Across specifications, the interaction term is positive, of similar size, and statistically measurable. However, the constituent term for left-wing head of government fails to reach conventional levels of sta-

[24] The potential bias induced by using country fixed effects and a lagged dependent variable (Nickell 1981) should not be a problem since T is greater than 20 (Beck and Katz 2011).

[25] The results remain the same using the raw data.

Table 3: Results: Income Tax

	(1)	(2)	(3)	(4)
Income tax share$_{t-1}$	0.767***	0.786***	0.782***	0.776***
	(0.0592)	(0.0595)	(0.0608)	(0.0631)
Left HoG	1.722	2.225***	2.209***	2.212**
	(1.166)	(0.826)	(0.807)	(0.862)
PR=1	-0.570	-0.802	-0.423	-1.011
	(1.834)	(1.911)	(2.027)	(2.437)
Left HoG X E. system	-2.901**	-3.367***	-3.710***	-3.482***
	(1.418)	(1.279)	(1.331)	(1.290)
War	0.964	1.311	1.313	1.224
	(0.973)	(1.037)	(1.070)	(1.156)
ln(GDP/capita)	6.621***	7.508***	7.611***	7.377***
	(1.996)	(2.116)	(2.045)	(1.928)
Tax/GDP		-0.165	-0.191*	-0.242**
		(0.105)	(0.105)	(0.113)
Religious HoG			-2.933*	-2.900*
			(1.582)	(1.545)
President			-4.362**	-6.651***
			(1.919)	(2.516)
Veto players				1.740
				(2.100)
Volatility				0.774**
				(0.363)
Country fixed effects	Yes	Yes	Yes	Yes
Period fixed effects	Yes	Yes	Yes	Yes
R-squared	0.9013	0.9093	0.9094	0.9045
Observations	642	609	605	563
Number of countries	23	23	23	22

Robust standard errors clustered by country in parentheses
Constants estimated but not reported
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

tistical significance when all controls are included (Model 4). This means that there is no measurable link between left-wing government and lower consumption taxes in majoritarian countries. However, marginal effects calculations (based on Model 4) reveal a positive link (p=.053) between left-wing rule and consumption tax revenues in PR systems, in line with previous findings.

The results reveal no statistically significant associations between ideology and social spending.[26] One reason for this may be the smaller sample (14 countries, 349 observations). Another reason may be the lower quality of this data. As mentioned above, the variable was

[26]See section 7 in the appendix.

Table 4: Results: Consumption

	(1)	(2)	(3)	(4)
Excise and cons.$_{t-1}$	0.849***	0.858***	0.860***	0.856***
	(0.0322)	(0.0369)	(0.0382)	(0.0383)
Left HoG	-0.900**	-0.787*	-0.773*	-0.890
	(0.424)	(0.468)	(0.455)	(0.592)
PR=1	0.0758	-0.0132	-0.130	0.490
	(0.956)	(0.874)	(0.950)	(0.839)
Left HoG X Electoral system	1.395***	1.493***	1.653***	2.127***
	(0.406)	(0.484)	(0.456)	(0.752)
War	0.392	0.729	0.635	0.524
	(0.766)	(0.862)	(0.873)	(0.824)
ln(GDP/capita)	-2.154	-2.261	-2.524	-3.794**
	(1.907)	(1.924)	(1.940)	(1.822)
Tax/GDP		-0.139	-0.124	-0.105
		(0.0960)	(0.0974)	(0.0871)
Religious HoG			1.181*	0.920
			(0.712)	(0.782)
President			-0.198	-1.148
			(1.066)	(2.691)
Veto players				3.783
				(3.027)
Volatility				0.277
				(0.395)
Country fixed effects	Yes	Yes	Yes	Yes
Period fixed effects	Yes	Yes	Yes	Yes
R-squared	0.901	0.903	0.902	0.897
Observations	707	673	669	643
Number of countries	19	19	19	19

Robust standard errors clustered by country in parentheses.
Constants estimated but not reported.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

created by adding different types of spending categories (health, public housing, education and social security) which may reduce precision. There is also a signficant number of gaps in the data series.

4.3 Case Studies

Below I provide a closer look at a few cases in order to bring more evidence to bear on the mechanism linking ideology to tax policy.

4.3.1 Germany

Germany had two left-wing head of governments in the period under investigation.[27] The first was Gustav Bauer between June 1919 and March 1920, followed by Hermann Müller from March to June 1920. During this short first period of left-wing rule, modern income taxes on individuals and corporation were introduced (Seelkopf et al. 2021), hardly reforms one associates with a weak and constrained left.

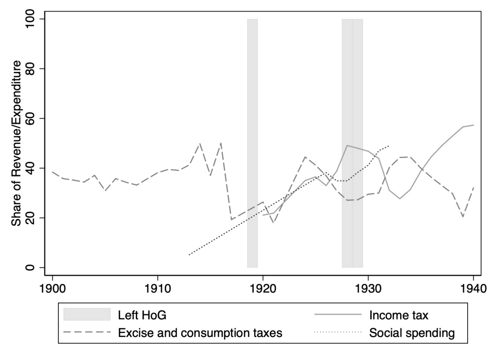


Figure 3: Taxation and Spending in Germany, 1900-1940
Sources: Andersson and Brambor (2019); Flora, Kraus and Pfenning (1983).

The second government was more long-lived, from June 1928 to March 1930, and headed again by the Social Democrat Hermann Müller. Figure 3 depicts how the income and consumption tax shares, as well as social spending, changed over time. Interestingly, the government led by the Social Democrat Müller oversaw a reduction in the income tax share, at the same time as the share of revenues from excise and consumption taxes grew slightly. During the same period, spending on social programs increased dramatically. The reason for this was that the unemployment insurance system introduced in July 1927 was designed to support 800,000 unemployed, while unemployment rose from 1.2 million in 1927 to 6.1 million in 1932. This dramatic increase in costs led to a conflict over the principles of the German welfare state, with employers and the German Peoples Party demanding cost cutting measures (Paster 2011). The SPD finance minister Rudolf Hilferding, a Marxist economist,

[27] The left-wing also participated in coalition governments with non-left prime ministers, but since the overall analysis focuses on heads of governments, I do so here as well.

pushed cutting taxes on income while raising taxes on consumption in order to finance the increasing costs of unemployment insurance (Picciotto 2022).[28] The idea to finance progressive spending with consumption taxes was not forced upon a the left by coalition partners, but was suggested by its own finance minister.

4.3.2 United States

The first left-wing president of the United States was Franklin D. Roosevelt who took office in 1933. In this period, fiscal policy was driven by a political commitment to redistribution and fairness. Examples of this were sharp increases in corporate tax rates and a (short-lived) new tax on undistributed corporate profits. The 1935 revenue act was replete with soak-the-rich ideology, and Treasury officials sought for a new tax on corporations, not to raise revenue but to punish the rich since "even as consumers continued to suffer, steep taxes on the rich might ease their pain" (Thorndike 2013, p.188).[29] The broadening of the personal income tax base and the subsequent increase in revenues was also important for the overall progressivity of the tax system since it allowed the rolling back of regressive consumption taxes during the Second New Deal (ibid.). This is clearly visible in the data in Figure 4 below.

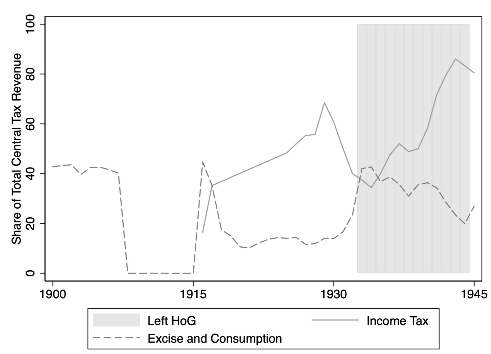


Figure 4: Taxation and Spending in the United States, 1900-1945
Source: Andersson and Brambor (2019).

[28]This proposal met with resistance from within the party and eventually led to his resignation.

[29]According to Thorndike (2013), the incidence of this tax on corporations – the undistributed profits tax – was key since "If revenue were the sole determinant of tax policy, then other taxes could have raised the same money with less fuss" (ibid.).

However, an even more important policy introduced in the 1935 budget was the Social Security plan. The implementation of this reform illustrates the precarious situation of left-wing governments in majoritarian systems. Aware that there would be strong, right-wing governments in the future, Roosevelt sought to insulate spending programs in order to ensure their long term survival. The Social Security plan was financed by regressive contributions and not progressive taxes, which drew criticism from the left. However, this method of financing would make the program "politically invulnerable" (Steinmo 1993, p. 99). In the words of Roosevelt: "We put those payroll contributions there so as to give the contributors a legal, moral, and political right to collect their pensions... With those taxes in there, no damn politician can ever scrap my social security program" (Derthick 1979, p. 230 quoted in Steinmo 1993).

If future elections would have been predictable, stable, and likely to favor the left – which is the case in PR systems – there would have been less need to protect those programs. Attempts at protecting policies from future reversals are not limited to the United States or to tax policy. Hicks (2013) documents how Labour in the United Kingdom insulated health care policy by "creating structures that reduced opportunities for subsequent Conservative governments to undermine the redistributive character of the system" (p. 207).

In sum, the US under Roosevelt shows how concerns of future loss of power influenced redistributive strategy. The effort to lock in redistributive policies suggest weakness rather than strength. Despite not having to please coalition partners, in Steinmo's assessment, the tax policies of the 1930s were surprisingly moderate (Steinmo 1993, ch. 4).

4.3.3 France

France is one of the few cases in which we can observe left-wing head of governments in both majoritarian and proportional settings in the same country. France switched from a majoritarian system to PR in 1918, and back to a majoritarian system in 1926.

During the first majoritarian period, there were two governments headed by a left-wing prime minister: Aristide Briand from July 1909 to February 1911, and Vivani/Briand from June 1914 to March 1917. Figure 5 below shows the development of income tax revenues, consumption tax revenues, and social spending in France 1900-1940.[30] During the second left-wing period under majoritarian rules (1914-1917), the Vivani and Briand ministries, income taxes increased in importance while excise and consumption revenues shrank. Between 1913 and 1919, there is a gap in the social spending data from Flora, Kraus and Pfenning (1983), but comparing the value for 1912 (14.2 percent of total central expenditure) with that of 1920 – 9.7 percent – there is a slight decrease. After being debated since 1907, the modern personal income tax was introduced in 1914 (André and Guillot 2014). The final bill was the result of a compromise in which the impact on the rich was softened (e.g., lower top rate) and the left agreed to extended military service (Seelkopf et al. 2021).

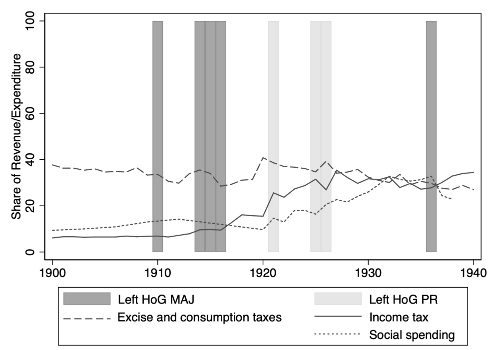


Figure 5: Taxation and Spending in France, 1900-1940
Source: Andersson and Brambor 2019, Flora et al 1983 (spending)

The first left-wing government during PR was the return of Aristide Briand in January 1921 (in office until January 16, 1922). This was followed by a longer period of left-wing rule between April 1925 and July 1926, with Henri Painlève and Briand as Prime ministers. Although the left opposed the general sales tax introduced in 1920, when they took power in 1925 they choose to keep it because of its revenue capacity (Daunton 2002). Looking at the data, this period is characterized by an increased reliance on excise and consumption taxes, from 34.7 percent in 1925 to 39.3 in 1926 (although it decreased again in 1927), and

[30]There were no left-wing governments before 1910, so for presentational purposes I focus on the 1900-1940 period.

a reduction in the income tax share (also this temporary). Social spending increased. The government kept the GST not because they were forced by a coalition partner but because they recognized its importance as a revenue source, and as we saw, they kept increasing spending on social programs.

The final left-wing government before WWII was the Popular Front government, elected in a majoritarian election and led by Léon Blum from the third of June 1936 to June 23 1937.[31] Instead of abolishing the general sales tax, the Blum government reformed it to a single-stage tax on production (Genschel and Seelkopf 2019). During Blum (and the Popular Front government) revenues from excise and consumption taxes decreased (from 29.7 percent in 1936 to 27 percent in 1940) while the share of revenues from income taxes grew (from 27.8 percent in 1936 to 34.4 percent in 1940). During the same period, spending on social programs decreased from 32.8 percent in 1936 to 22.8 percent in 1938 (data is missing for 1939 and 1940). Total tax revenues as a share of GDP also fell.

Consistent with the hypothesis outlined in section 2, the tax mix did turn more progressive during this period, and total tax revenues fell while a smaller share of expenditures were directed at social programs.

5 Conclusion

In this paper I have argued that left-wing governments tax differently depending on the electoral system. The reason for this, I argue, is that left-wing governments use different strategies for redistribution in different electoral contexts. In PR, the left chooses regressive taxation with progressive spending, in majoritarian systems the left instead taxes progressively but redistributes less on the spending side.

Since redistribution can be achieved in other ways than through progressive income taxation, and since social spending and redistribution tend to be higher in left-wing run PR

[31] Blum was succeded by Radical Socialist Chautemps and later by Daladier of the same party. The Popular Front was dissolved in the fall of 1938.

countries, the explanation that the left taxes regressively in PR because it is constrained or weak is unconvincing.

The historical patterns are also in line with with this view. In PR countries, the left implements a more regressive tax mix but compensates with progressive spending. The case study evidence suggest these policies were not forced upon the left by coalition partners (or other types of constraints). Moreover, evidence from the cases do not support the idea that the left was unconstrained in majoritarian systems. In fact, the prospect of a future loss of power influenced current fiscal policy.

The analysis of the new historical data sources reveal interesting patterns also for other debates. For instance, the data shows that the left taxed consumption more (in some contexts) even before the great post-WWII expansion of the welfare state (and before the VAT), which speaks to the debate about whether it was welfare state expansion that drove consumption taxation or vice versa (Kato 2003; Ganghof 2006).

The results are also relevant for theories of democratization stressing redistributive threat as a main factor driving elite resistance to reform (Acemoglu and Robinson 2001; Boix 2003). If certain institutional configurations are more likely to moderate taxes on the rich, this may reduce risk of an authoritarian counter coup. Redistribution stressing spending on the poor is less dangerous than redistribution stressing taxing the rich.

In analyzing the implications for electoral system choice, Iversen and Soskice (2009) suggest that "In most cases PR was chosen by the center and right (the left not having full franchise). Given the redistributional consequences of PR..., its choice implied that the center and right put the positive representational benefits above the redistributive costs". The historical patterns suggest a different explanation: the right trading progressive spending for lower income taxation. It matters who pays for social spending.

Finally, this exploration of early left-wing tax policy is very preliminary. Still, I have shown the pitfalls of analyzing taxation or spending in isolation, and the dangers of making simplified assumptions regarding redistributive strategies. However, there is still much to do concerning data. One fruitful avenue for future research is collecting and harmonizing social spending data for a larger sample in the pre-war era. In particular in Latin America.

References

Acemoglu, Daron and James A. Robinson. 2001. "A Theory of Political Transitions." *American Economic Review* 91(4):938–963.

Aidt, Toke S., Jayasri Dutta and Elena Loukoianova. 2006. "Democracy comes to Europe: Franchise extension and fiscal outcomes 1830-1938." *European Economic Review* 50:249–283.

Aidt, Toke S. and Peter S. Jensen. 2009*a*. "Tax structure, size of government, and the extension of the voting franchise in Western Europe, 1860-1938." *International Tax and Public Finance* 16:362–394.

Aidt, Toke S. and Peter S. Jensen. 2009*b*. "The taxman tools up: An event history study of the introduction of the personal income tax." *Journal of Public Economics* 93(1-2):160–175.

Aidt, Toke S. and Peter S. Jensen. 2016. "From Open to Secret Ballot: Vote Buying and Modernization." *Comparative Political Studies* Forthcoming.

Andersson, Per F. 2022*a*. "Fiscal capacity in non-democratic states: the origins and expansion of the income tax." *Journal of Institutional Economics* pp. 1–15. Publisher: Cambridge University Press.

Andersson, Per F. 2022*b*. "Taxation and Left-Wing Redistribution: The Politics of Consumption Tax in Britain and Sweden." *Comparative Politics* 54(2):279–301.

Andersson, Per F. and Thomas Brambor. 2019. "Financing the State: Government Tax

Revenue from 1800 to 2012.”.
URL: *https://www.perfandersson.com/data*

André, Mathias and Malka Guillot. 2014. “1914 - 2014: One Hundred Years of Income Tax in France.” *IPP Policy Brief* 12.

Astorga, Pab, Ame R. Berges, E. Valpy K. Fitzgerald and Thorp Rosemary. 2010. “The Montevideo-Oxford Latin American Economic History Database (MOxLAD).”.
URL: *http://oxlad.qeh.ox.ac.uk/*

Barnes, Lucy. 2020. “Trade and redistribution: trade politics and the origins of progressive taxation.” *Political Science Research and Methods* 8(2):197–214.

Beck, Nathaniel and Jonathan N. Katz. 2011. “Modeling Dynamics in Time-Series-Cross-Section Political Economy Data.” *Annual Review of Political Science* 14:331–352.

Beramendi, Pablo and David Rueda. 2007. “Social Democracy Constrained: Indirect Taxation in Industrialized Democracies.” *British Journal of Political Science* 37(4):619–641.

Blanchet, Thomas, Lucas Chancel and Amory Gethin. 2022. “Why Is Europe More Equal than the United States?” *American Economic Journal: Applied Economics* 14(4):480–518.
URL: *https://www.aeaweb.org/articles?id=10.1257/app.20200703*

Boix, Carles. 2003. *Democracy and Redistribution.* New York, NY: Cambridge University Press.

Boix, Carles, Michael K Miller and Sebastian Rosato. 2013. “A Complete Data Set of Political Regimes, 1800-2007.” *Comparative Political Studies* 46(12):1523–1554.

Bradley, David, Evelyne Huber, Stephanie Moller, François Nielsen and John D. Stephens. 2003. “Distribution and Redistribution in Postindustrial Democracies.” *World Politics* 55(2):193–228.

Brambor, Thomas, Johannes Lindvall and Annika Stjernquist. 2014. "The Ideology of Heads of Government (HOG), 1870-2012.".

Buchanan, James M. 1949. "The Pure Theory of Government Finance: A Suggested Approach." *Journal of Political Economy* 57(6):496–505.

Cameron, David R. 1978. "The Expansion of the Public Economy: A Comparative Analysis." *American Political Science Review* 72(4):1243–1261.

Colomer, Josep M. 2004. The Strategy and History of Electoral System Choice. In *Handbook of Electoral System Choice*. Hampshire and New York: Palgrave Macmillan.

Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, Steven M. Fish, Adam Glynn, Allen Hicken, Carl Henrik Knutsen, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Moa Olin, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Constanza Sanhueza Petrarca, Johannes von Römer, Laura Saxer, Brigitte Seim, Rachel Sigman, Jeffrey Staton, Natalia Stepanova and Steven Wilson. 2020. *V-Dem [Country-Year/Country-Date] Dataset v10*. Varieties of Democracy (V-Dem) Project.

Cusack, Thomas R. 1997. "Partisan politics and public finance: Changes in public spending in the industrialized democracies, 1955–1989." *Public Choice* 91(3-4):375–395.

Cusack, Thomas R. and Pablo Beramendi. 2006. "Taxing work." *European Journal of Political Research* 45:43–73.

Daunton, Martin. 2002. *Just Taxes - The Politics of Taxation in Britain, 1914-1979*. Cambridge, United Kingdom: Cambridge University Press.

de Figueiredo, Jr., Rui J. P. 2002. "Electoral Competition, Political Uncertainty, and Policy Insulation." *The American Political Science Review* 96(2):321–333.

Díaz, José B., Rolf Schwarzenberg Lüders and Gert Wagner. 2016. *Chile 1810-2010: La República en Cifras : Historical Statistics*. Ediciones Universidad Católica de Chile.

Elkjær, Mads Andreas and Torben Iversen. 2022. "The Democratic State and Redistribution: Whose Interests Are Served?" *American Political Science Review* pp. 1–16.

Emmenegger, Patrick, Lucas Leemann and André Walter. 2020. "No Direct Taxation Without New Elite Representation Industrialization and the Domestic Politics of Taxation." *European Journal of Political Research* .

Engel, Eduardo M.R.A., Alexander Galetovic and Claudio E. Raddatz. 1999. "Taxes and income distribution in Chile: some unpleasant redistributive arithmetic." *Journal of Development Economics* 59(1):155–192.

Flora, Peter, Franz Kraus and Winfried Pfenning. 1983. *State, Economy, and Society in Western Europe 1815-1975: The growth of industrial societies and capitalist economies*. Campus Verlag.

Fund, International Monetary. 2001. *Government Finance Statistics Manual 2001*. IMF.

Ganghof, Steffen. 2006. "Tax mixes and the size of the welfare state: causal mechanisms and policy implications." *Journal of European Social Policy* 16(4):360–373.

Garfinkel, Irwin, Lee Rainwater and Timothy M. Smeeding. 2006. "A re-examination of welfare states and inequality in rich nations: How in-kind transfers and indirect taxes change the story." *Journal of Policy Analysis and Management* 25(4):897–919. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1002/pam.20213.

Genschel, Philipp and Laura Seelkopf. 2019. *Codebook - Tax Introduction Dataset Version May 2019*. Florence: European University Institute.
URL: *https://www.tid.seelkopf.eu*

Genschel, Philipp, Laura Seelkopf, Moritz Bubek, Edgars Eihmanis, Joseph Ganderson, Julian Limberg, Youssef Mnaili and Paula Zuluaga. 2019. "The rise of modern taxation: A new comprehensive dataset of tax introductions worldwide." *The Review of International Organizations* .

Gilens, Martin. 2005. "Inequality and Democratic Responsiveness." *Public Opinion Quarterly* 69(5):778–796.

Henisz, Witold J. 2000. "The Institutional Environment for Economic Growth." *Economics and Politics* 12(1):1–31.

Hibbs, Jr, Douglas A. 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71(4):1467–1487.

Hicks, Alexander M. and Duane H. Swank. 1992. "Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960-82." *American Political Science Review* 86(3):658–674.

Hicks, Timothy. 2013. "Partisan Strategy and Path Dependence: The Post-War Emergence of Health Systems in the UK and Sweden." *Comparative Politics* 45(2):207–226.

Huber, Evelyne, Charles Ragin and John D. Stephens. 1993. "Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State." *American Journal of Sociology* 99(3):711–749.

Iversen, Torben and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More than Others." *American Political Science Review* 100(2):165–181.

Iversen, Torben and David Soskice. 2009. "Distribution and Redistribution: The Shadow of the Nineteenth Century." *World Politics* 61(3):438–486.

Joumard, Isabelle, Mauro Pisu and Debra Bloch. 2012. Less Income Inequality and More Growth – Are They Compatible? Part 3. Income Redistribution via Taxes and Transfers Across OECD Countries. OECD Economics Department Working Papers Organisation for Economic Co-operation and Development Paris: .

Karatnycky, Adrian. 2000. "A Century of Progress." *Journal of Democracy* 11(1):187–200.

Kato, Junko. 2003. *Regressive Taxation and the Welfare State.* New York: Cambridge University Press.

Kemmerling, Achim. 2022. Social Security Contributions and the Fiscal Origins of the Welfare State. In *Global Taxation: How Modern Taxes Conquered the World*, ed. Philipp Genschel and Laura Seelkopf. Oxford University Press p. 0.
URL: *https://doi.org/10.1093/oso/9780192897572.003.0010*

Kittel, Bernhard and Herbert Obinger. 2003. "Political parties, institutions, and the dynamics of social expenditure in times of austerity." *Journal of European Public Policy* 10(1):20–45.

Kühner, Stefan. 2010. "Do Party Governments Matter After All? Executive Ideology, Constitutional Structures and their Combined Effect on Welfare State Change." *Journal of Comparative Policy Analysis: Research and Practice* 12(4):395–415.

Lijphart, Arend. 2012. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries.* Second ed. New Haven & London: Yale University Press.

Lindert, Peter H. 2004*a*. *Growing Public - Social Spending and Economic Growth since the Eighteenth Century. Volume 2: Further Evidence.* Cambridge, UK: Cambridge University Press.

Lindert, Peter H. 2004*b*. *Growing Public - Social Spending and Economic Growth Since the Eighteenth Century. Volume I: The Story.* Cambridge, UK: Cambridge University Press.

Maddison. 2007. *The World Economy: Historical Statistics*. Paris: OECD Development Centre.

Mares, Isabela and Didac Queralt. 2014. *The Conservative Origin of Income Taxation*. Working Paper.

Mares, Isabela and Didac Queralt. 2015. "The Non-Democratic Origins of Income Taxation." *Comparative Political Studies* 48(14):1974–2009.

Meltzer, Allan H. and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5):914–927.

Milanovic, Branko. 2016. *Global Inequality: A New Approach for the Age of Globalization*. Harvard University Press.

Mitchell, B. R. 2007. *International historical statistics: Africa, Asia & Oceania, 1750-2005*. 5 ed. New York: Palgrave Macmillan.

Morgan, Kimberly J. and Monica Prasad. 2009. "The Origins of Tax Systems: A French-American Comparison." *American Journal of Sociology* 114(5):1350–1394.

Nickell, Stephen. 1981. "Biases in Dynamic Models with Fixed Effects." *Econometrica* 49(6):1417–1426.

Palmer, Glenn, Vito D'Orazio, Michael Kenwick and Matthew Lane. 2015. "The MID4 dataset, 2002–2010: Procedures, coding rules and description." *Conflict Management and Peace Science* 32(2):222–242.

Paster, Thomas. 2011. "German Employers and the Origins of Unemployment Insurance: Skills Interest or Strategic Accommodation?".
URL: *https://papers.ssrn.com/abstract=2188278*

Persson, Torsten and Guido Tabellini. 2003. *The Economic Effects of Constitutions*. Cambridge, MA: MIT Press.

Picciotto, Sol. 2022. Marxism and Socialism: Progressive Taxation and Socialisation of Property. In *Political Philosophy and Taxation: A History from the Enlightenment to the Present*, ed. Robert F. van Brederode. Singapore: Springer Nature pp. 151–194.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century.* Harvard University Press.

Powell, Bingham G. 2000. *Elections as Instruments of Democracy.* New Haven: Yale University Press.

Prasad, Monica and Yingying Deng. 2009. "Taxation and the worlds of welfare." *Socio-Economic Review* 7(7):431–457.

Przeworski, Adam et al. 2013. *Political Institutions and Political Events (PIPE) Dataset.* New York University: Department of Politics.

Rae, Douglas W. 1967. *The Political Consequences of Electoral Laws.* Vol. 1967 New Haven and London: Yale University Press.

Roemer, John E. 1998. "Why the poor do not expropriate the rich: an old argument in new garb." *Journal of Public Economics* 70(3):399–424.

Rogowski, Ronald. 1987. "Trade and the Variety of Democratic Institutions." *International Organization* 41(2):203–223.

Scheve, Kenneth and David Stasavage. 2016. *Taxing the Rich: A History of Fiscal Fairness in the United States and Europe.* Princeton University Press.

Schmidt, Manfred G. 1996. "When parties matter: A review of the possibilities and limits of partisan influence on public policy." *European Journal of Political Research* 30:155–183.

Seelkopf, Laura, Moritz Bubek, Edgars Eihmanis, Joseph Ganderson, Julian Limberg, Youssef Mnaili, Paula Zuluaga and Philipp Genschel. 2021. "The rise of modern taxation: A new comprehensive dataset of tax introductions worldwide." *The Review of International Organizations* 16(1):239–263.

Seki, Katsunori and Laron K. Williams. 2014. "Updating the Party Government data set." *Electoral Studies* 34:270–279.

Steinmo, Sven. 1993. *Taxation and Democracy.* New Haven and London: Yale University Press.

Tavits, Margit. 2004. "The Size of Government in Majoritarian and Consensus Democracies." *Comparative Political Studies* 37(3):340–359.

Thorndike, Joseph J. 2013. *Their Fair Share: Taxing the Rich in the Age of FDR.* Washington, D.C: The Urban Institute Press.

Timmons, Jeffrey F. 2005. "The Fiscal Contract: States, Taxes, and Public Services." *World Politics* 57(4):530–567.

Timmons, Jeffrey F. 2010*a*. "Taxation and Credible Commitment: Left, Right, and Partisan Turnover." *Comparative Politics* 42(2):207–227.

Timmons, Jeffrey F. 2010*b*. "Taxation and Representation in Recent History." *The Journal of Politics* 72(1):191–208.

Whiting, Richard. 2000. *The Labour Party and Taxation – Party Identity and Political Purpose in Twentieth-Century Britain.* Cambridge, United Kingdom.: Cambridge University Press.

6 Appendix

6.1 Sample

The regressions do not include all 31 countries for which there is tax data. One of the reasons for this is that I restrict the sample to democracies. Moreover, some countries did not have an income tax in place until fairly late, or might be missing data for a tax variable during

Table 5: Taxation and Spending

Tax and Spending 1870-1945				
	Income Tax	Excise and Consumption Tax	Social Spending	Tax/GDP
PR	25.94	27.47	26.50	9.69
MAJ	23.44	21.8	21.85	8.45
Left HoG	32.94	30.72	25.10	10.77
Non-left	23.13	22.58	24.12	8.25

the years in which it was democratic. For instance, Mexico is not coded as democratic in any year from 1870 to 1945.

In the income tax regressions, the following 22 countries are included: Argentina, Australia, Austria, Belgium, Canada, Chile, Colombia, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, UK, US, Uruguay.

In the consumption tax regressions, the following 19 countries are included: Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, UK, US.

6.2 Additional Tables and Figures

Table 5 below reports the average of income tax share, excise and consumption tax share, social spending, and tax over GDP for the 1870-1945 period. We see that PR countries rely more on excise and consumption taxes and spend more on social programs compared to majoritarian systems. Left-wing governments are larger and rely more on income and consumption taxes than center and right-wing governments. However, there is no large difference in social spending.

Note: source for tax data: Andersson and Brambor (2019) , sources for spending: Flora, Kraus and Pfenning (1983) and Diaz et al 2016.

Table 6: Taxation and Ideology of HoG

Averages Tax and Spending 1870-1945				
	Income Tax	Excise and Consumption Tax	Social Spending	Tax/GDP|
PR	25.94	27.47	26.50	9.69
MAJ	23.44	21.8	21.85	8.45
Left HoG	32.94	30.72	25.10	10.77
Center HoG	23.42	22.73	23.88	8.88
Right HoG	22.88	22.47	24.37	7.8

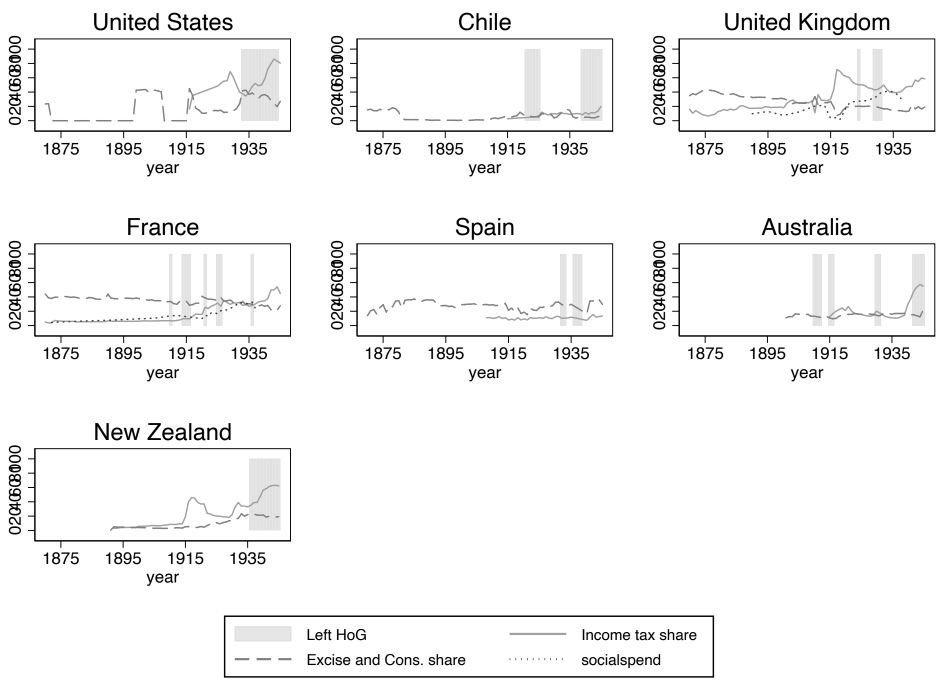


Figure 6: Taxation in Majoritarian Countries
Sources: Andersson and Brambor (2019).

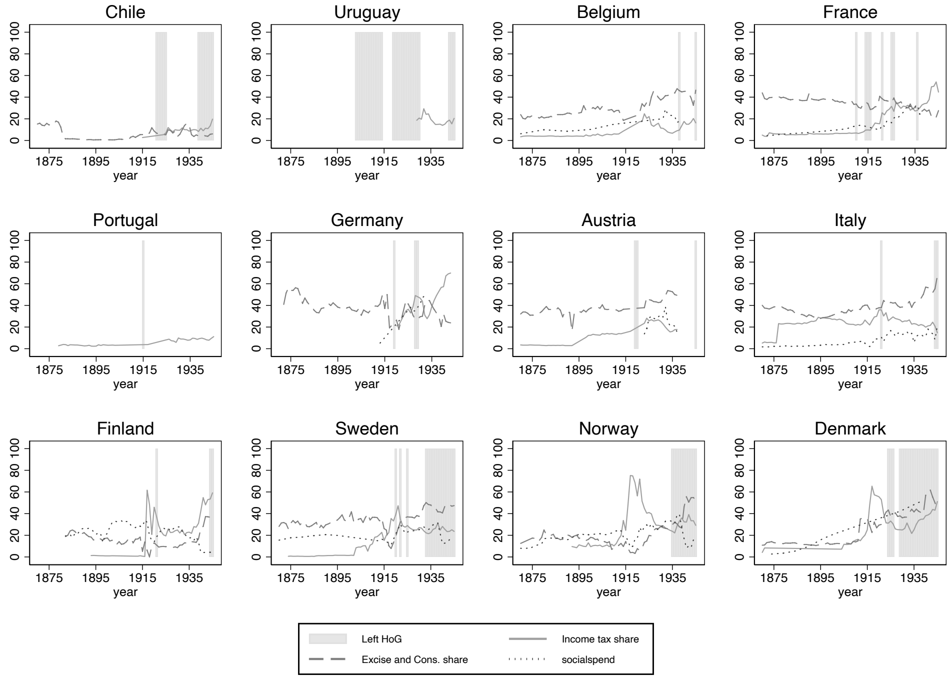


Figure 7: Taxation in PR
Sources: Andersson and Brambor (2019).

Table 7: Results: Spending

	(1)	(2)	(3)	(4)
Social Spending t-1	0.802***	0.788***	0.791***	0.768***
	(0.0410)	(0.0440)	(0.0438)	(0.0535)
Left HoG	-0.112	-0.120	-0.117	1.088
	(1.306)	(1.656)	(1.651)	(2.153)
PR=1	0.326	0.455	0.480	0.654
	(0.597)	(0.662)	(0.665)	(0.906)
Left HoG X PR=1	0.299	0.324	0.234	-0.903
	(1.303)	(1.652)	(1.640)	(2.052)
War	-0.704	-0.758	-0.777	-0.867
	(0.518)	(0.662)	(0.679)	(0.665)
ln(GDP/capita)	-2.914	-3.218	-3.104	-2.797
	(1.822)	(1.822)	(1.839)	(2.276)
Tax/GDP		0.109	0.105	0.0801
		(0.0957)	(0.0968)	(0.0916)
Religious HoG			-0.717	-0.388
			(0.481)	(0.649)
Veto players				-4.524
				(3.096)
Volatility				-0.228
				(0.380)
Country fixed effects	Yes	Yes	Yes	Yes
Period fixed effects	Yes	Yes	Yes	Yes
R-squared	0.914	0.907	0.905	0.904
Observations	396	379	375	349
Number of countries	14	14	14	14

Robust standard errors clustered by country in parentheses
Constants estimated but not reported
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

7 The Government Revenue Dataset

The overall aim of the coding process has been to create time series that are internally consistent within a country over time and connects to contemporary datasets (such as the OECD for European and North American countries and CEPAL for South America) in order to allow easy updates of the dataset. An advantage of this approach is that it is suitable for fixed-effects models, like the ones employed in this paper. We also aimed at minimizing the number of sources for each data series while keeping high coverage over time. Our main interest is to explain long-run trends within countries, so in situations were we needed to prioritize between using one source to obtain cross-country consistency and employing different sources to reach within-country consistency, we preferred the latter. There are many decisions involved in creating the final dataset and I refer the interested reader to the codebook (available at perfandersson.com/data) in which we also list all the country-specific primary and secondary sources that we used in the final version of the dataset.

In order to make the dataset comparable over time we needed to settle for a fairly simple structure. The total tax revenue of the *central* state is disaggregated based on the guidelines set out in the *Government Finance Statistics Manual 2001* of the International Monetary Fund (2001), but given the paucity of historical data and the focus of our project, we combined some categories. Total central tax revenue is divided into direct and indirect taxes. Further, two subcategories of direct taxes are measured separately: taxes on property and taxes on income. The subcategories of indirect taxes are: consumption taxes, excises, and customs (which includes taxes on import, exports, exchange profits, and profits from export/import monopolies). Property taxes include taxes on real estate, wealth, and land taxes. The income tax category includes taxes on income, profits, and capital gains by individuals and corporations as well as taxes on payrolls and workforces. Ideally, these categories should be measured separately, however, the historical data sources rarely allow for a more fine-grained categorization. Tax on consumption consists mainly of sales and turnover taxes prior to the introduction of value-added taxes in the 1950s and 1960s. Excises are taxes on specific goods, for example tobacco or alcoholic beverages. Excise and consumption taxes are collapsed into one category in the empirical section since the theory does not distinguish between the two. Finally, it is important to note that the focus on tax revenue means that fees and social security contributions are excluded.

Restricting the data to the central level allows for a larger sample, both in time and across countries. It is important to note that this is problematic in cases where there is significant subnational authority in the area of taxing and spending, as this revenue will not show up in our data.

It is important to note that even though the sample is the widest available, it still excludes a significant part of the world. For example, the dataset contains no countries from Eastern Europe or Africa and includes only one Asian country (Japan). Data availability also means there is a bias towards more developed countries, and Europe is overrepresented for earlier years. Another important aspect is that the sample varies over time – i.e., countries are only included once they are independent, which means that the sample is smaller in the beginning of the nineteenth century. Data limitations also mean that Europe is overrepresented for earlier years. However, the universe of possible cases also changes over time. For example, in the beginning of the twentieth century there were only 55 sovereign states in the world (Karatnycky 2000).

The number of countries included also varies depending on data availability. Sometimes there is no information available for a country in a specific year. This can be the result of lack of data or that there was no tax of that type. For example, the number of countries with an existing income tax was much lower in the nineteenth than in the twentieth century.