

Rising Inequality and Globalisation

Thomas Piketty

EHESS and Paris School of Economics

Groningen, May 23 2018

- **In this presentation I will show results from:**
- **« World Inequality Report 2018 »** (see wir2018.wid.world) (70+ countries)

Extended series on global inequality. **Key role of politics in downturns & upturns.**

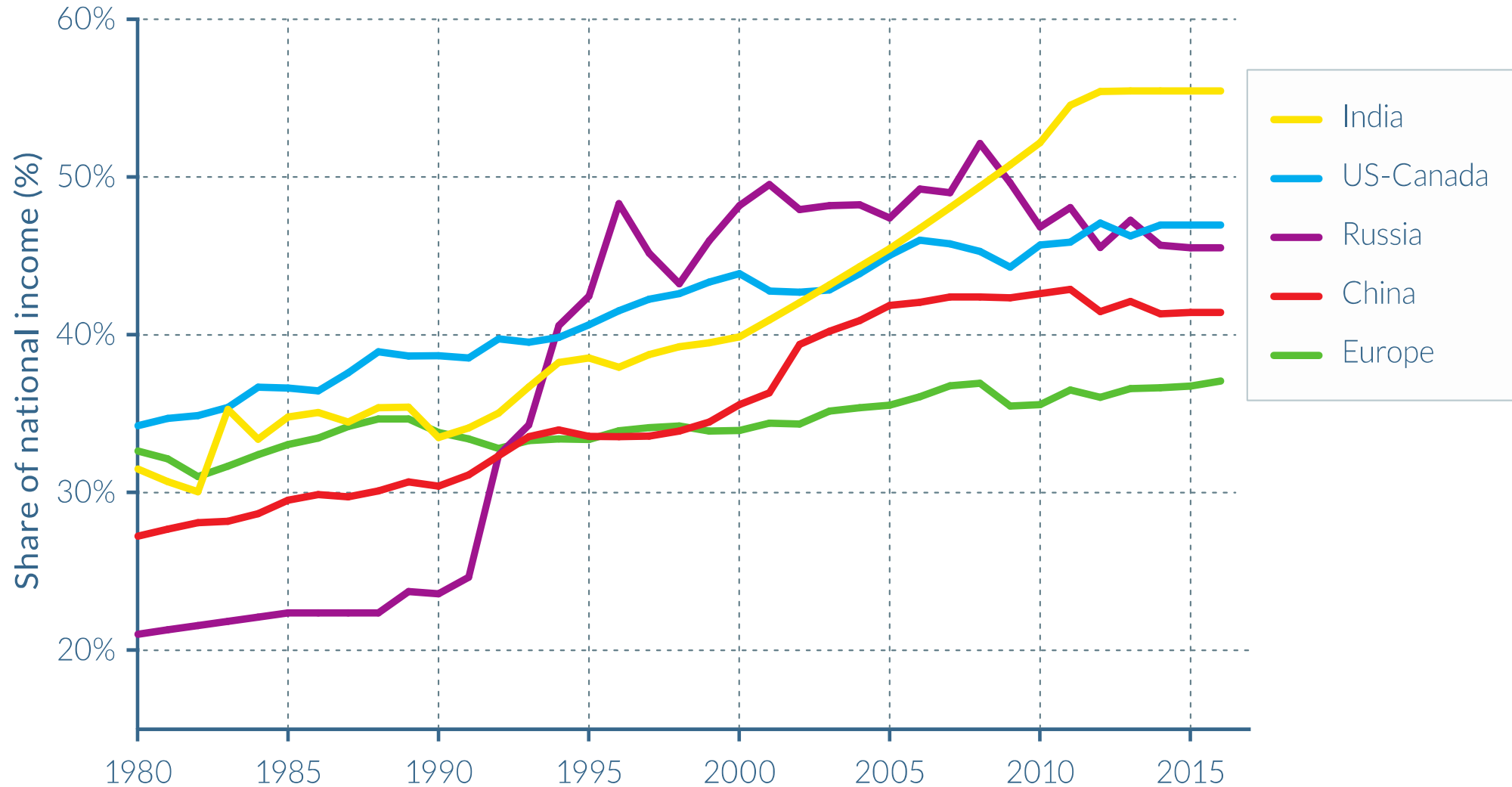
- **« Brahmin Left vs Merchant Right: Rising Inequality and the Changing Structure of Political Conflict »** (see piketty.pse.ens.fr/conflict)

New series on changing political cleavages in FR-US-UK 1948-2017 documenting the shift from class-based political conflict to multiple-elite and identity-based political conflict; can explain lack of political response to rising inequality.

- **Explanations for changes in cleavage structure:**
- **Rise of globalization/migration cleavage: division among lower classes**
- **Rise of higher education: end of egalitarian education platform**
- **Changes in global ideology.** Lack of a strong and convincing egalitarian-universalist platform. Partly due to elite capture, but also due to ideological weakness and left discouragement since collapse of communism. A more ambitious egalitarian platform could make a difference.

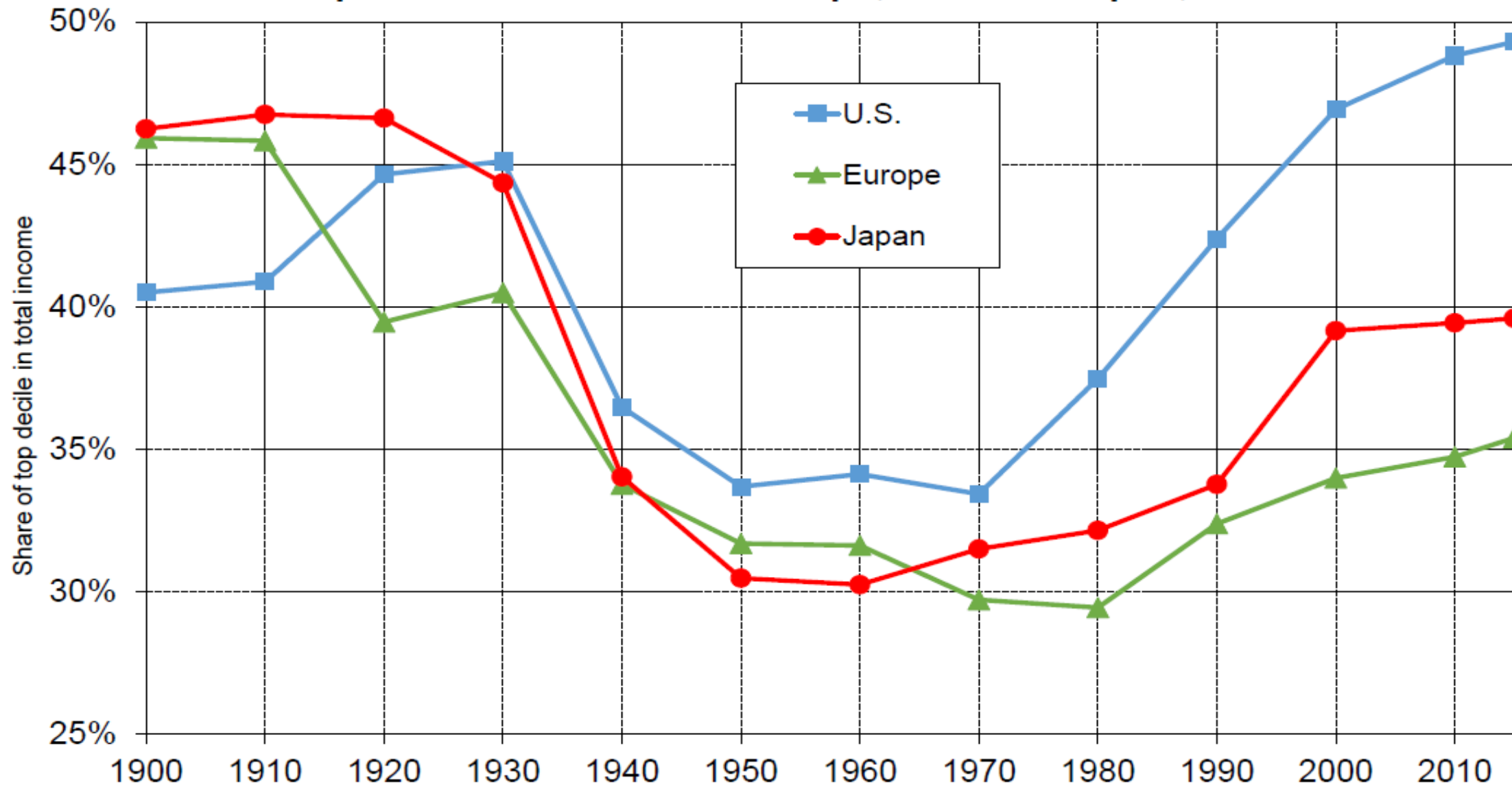
- **We observe rising inequality in most world regions since 1980**
- One could have expected rising political demand for redistribution
- So why do we see more xenophobic populism and identity-based politics (Brexit, Trump, Le Pen, Modi, AfD, etc.), rather than more class-based (income-based or wealth-based) politics?
- **Why hasn't democracy slowed rising inequality ?**
- **Was there something unique about 1950-1980 egalitarian period? Why did it happen and why did it end? Will it happen again?**
- Do we need extreme circumstances (wars, crisis, revolutions, etc.) to produce the kind of Social-Democratic/New-Deal political coalitions which led to the reduction of inequality during 1950-1980 period?
- **Politics drive inequality trends (both downturns and upturns). So we need to better understand political attitudes on inequality.**

Top 10% income shares across the world, 1980-2016



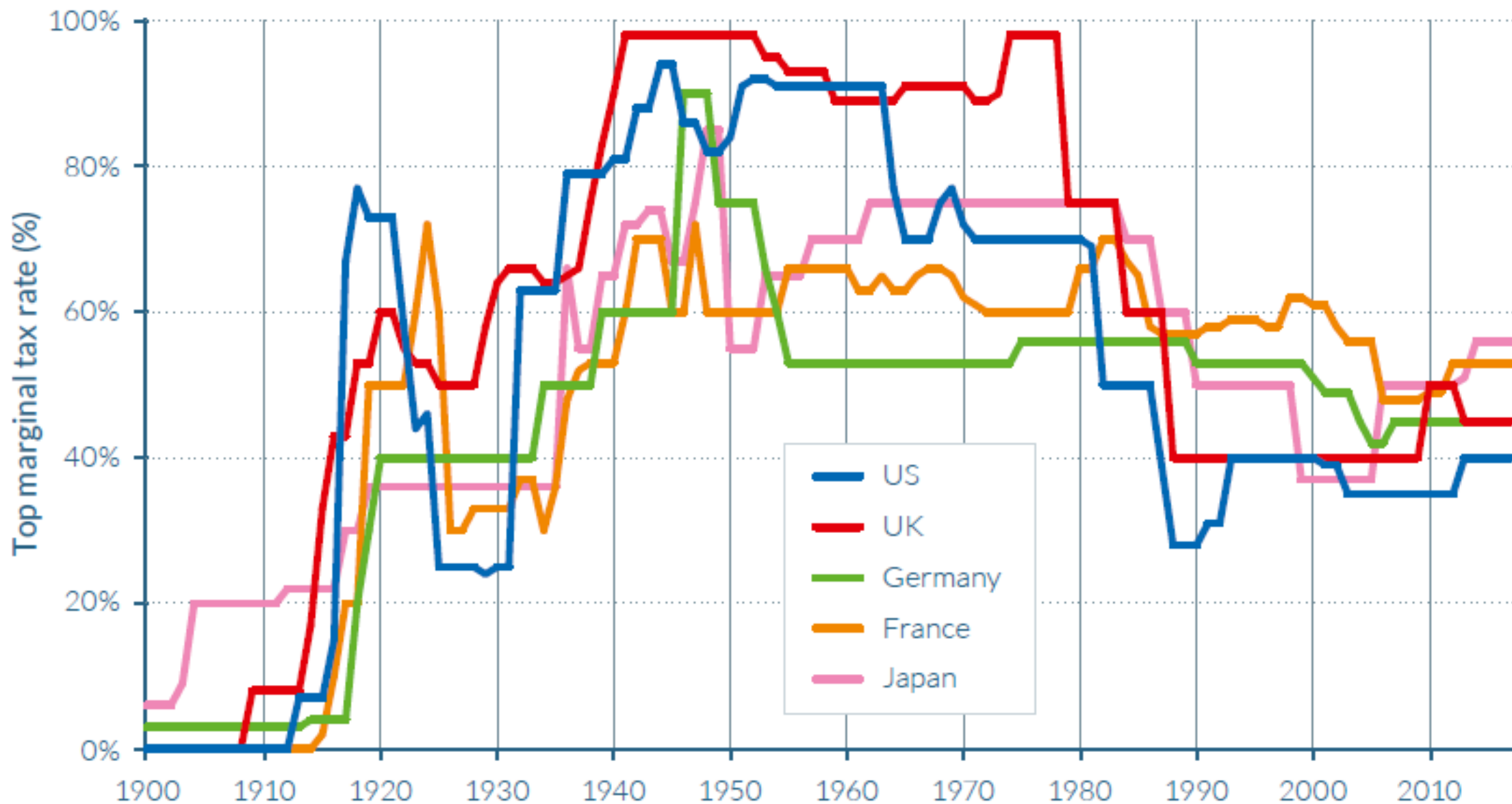
Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.

Top 10% Income Share: Europe, U.S. and Japan, 1900-2015



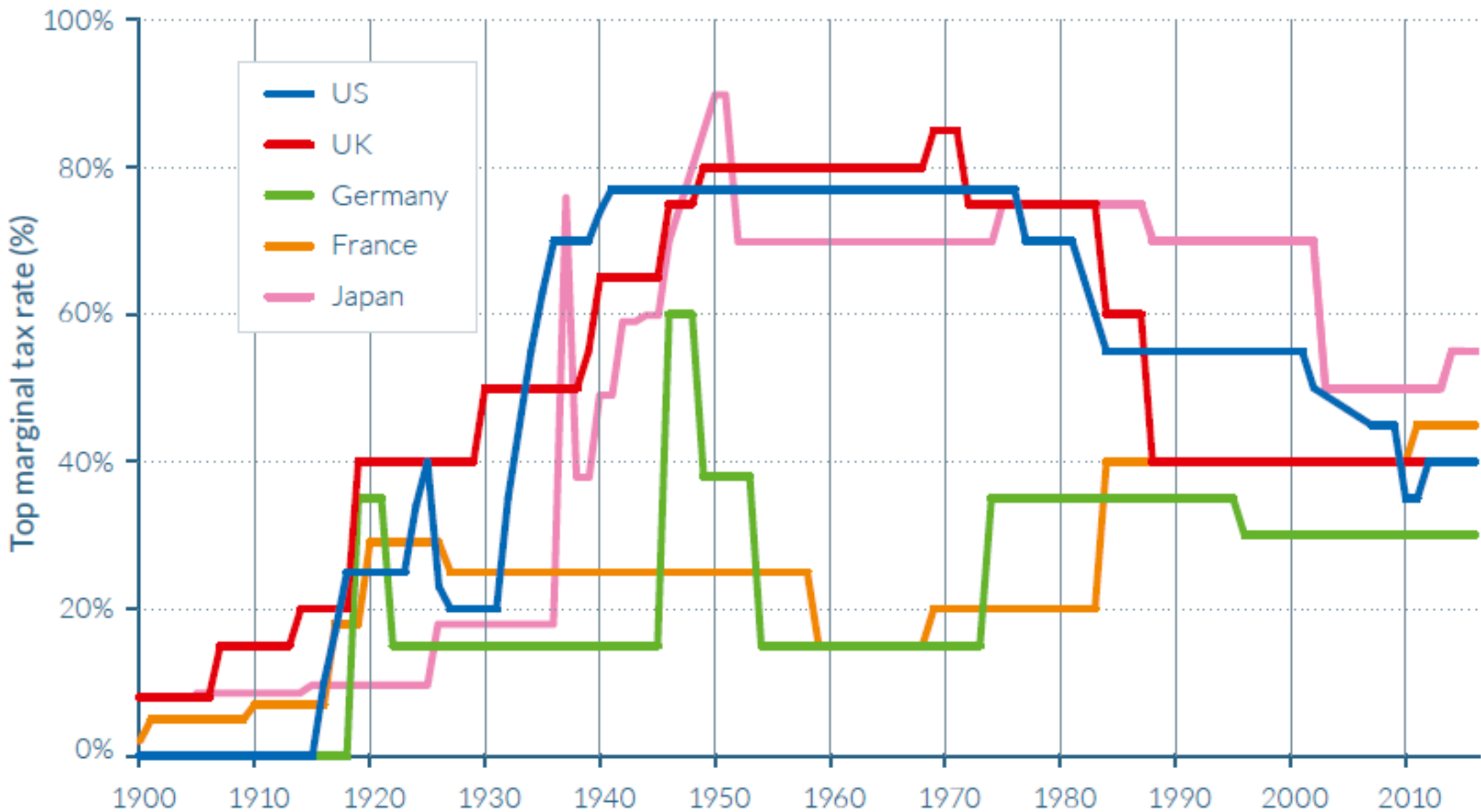
The top decile income share was higher in Europe than in the U.S. in 1900-1910; it is a lot higher in the U.S. in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c and WID.world updates.

Top income tax rates in rich countries, 1900-2017



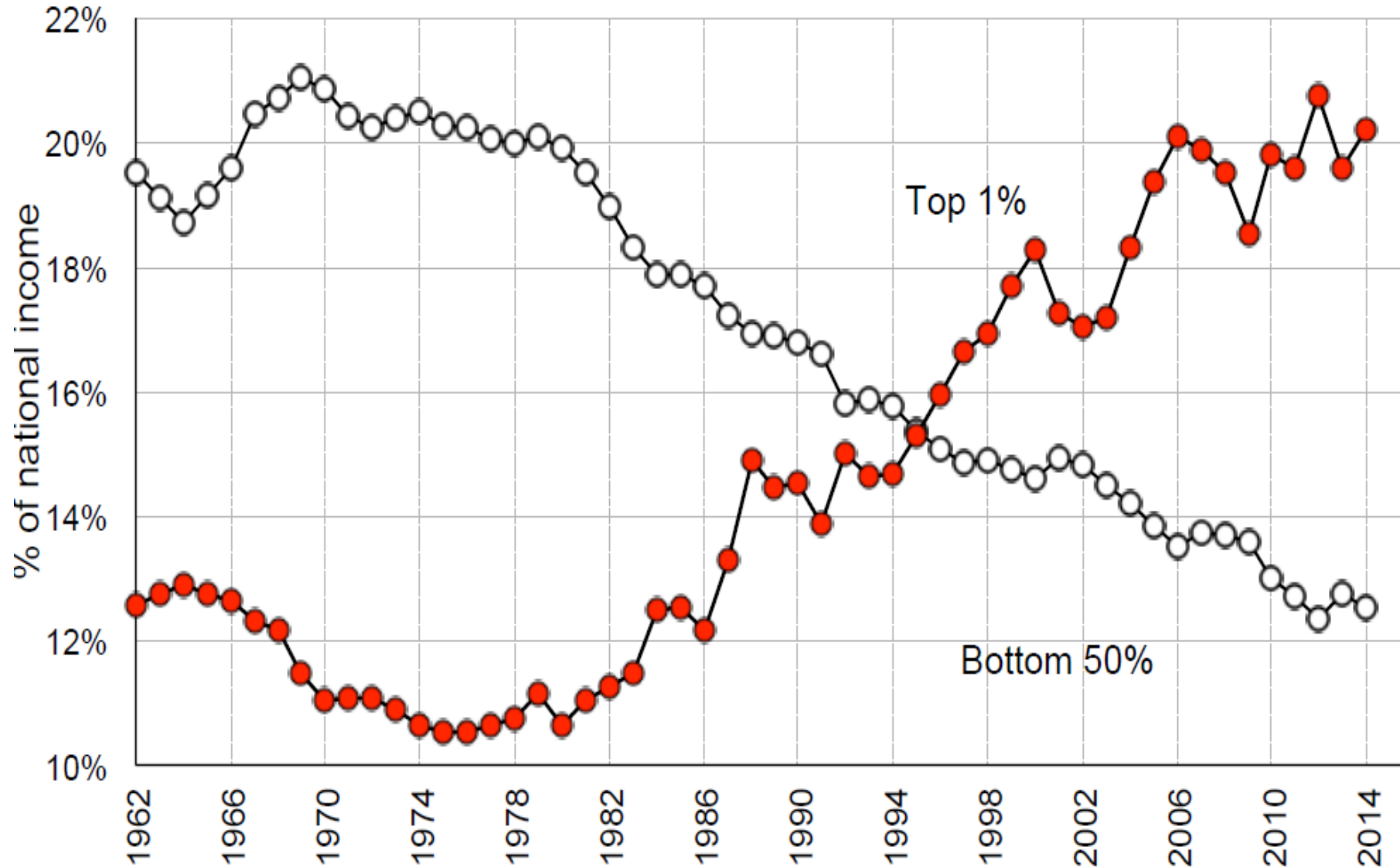
Source: World Inequality Report 2018, wir2018.wid.world

Top inheritance tax rates in rich countries, 1900-2017

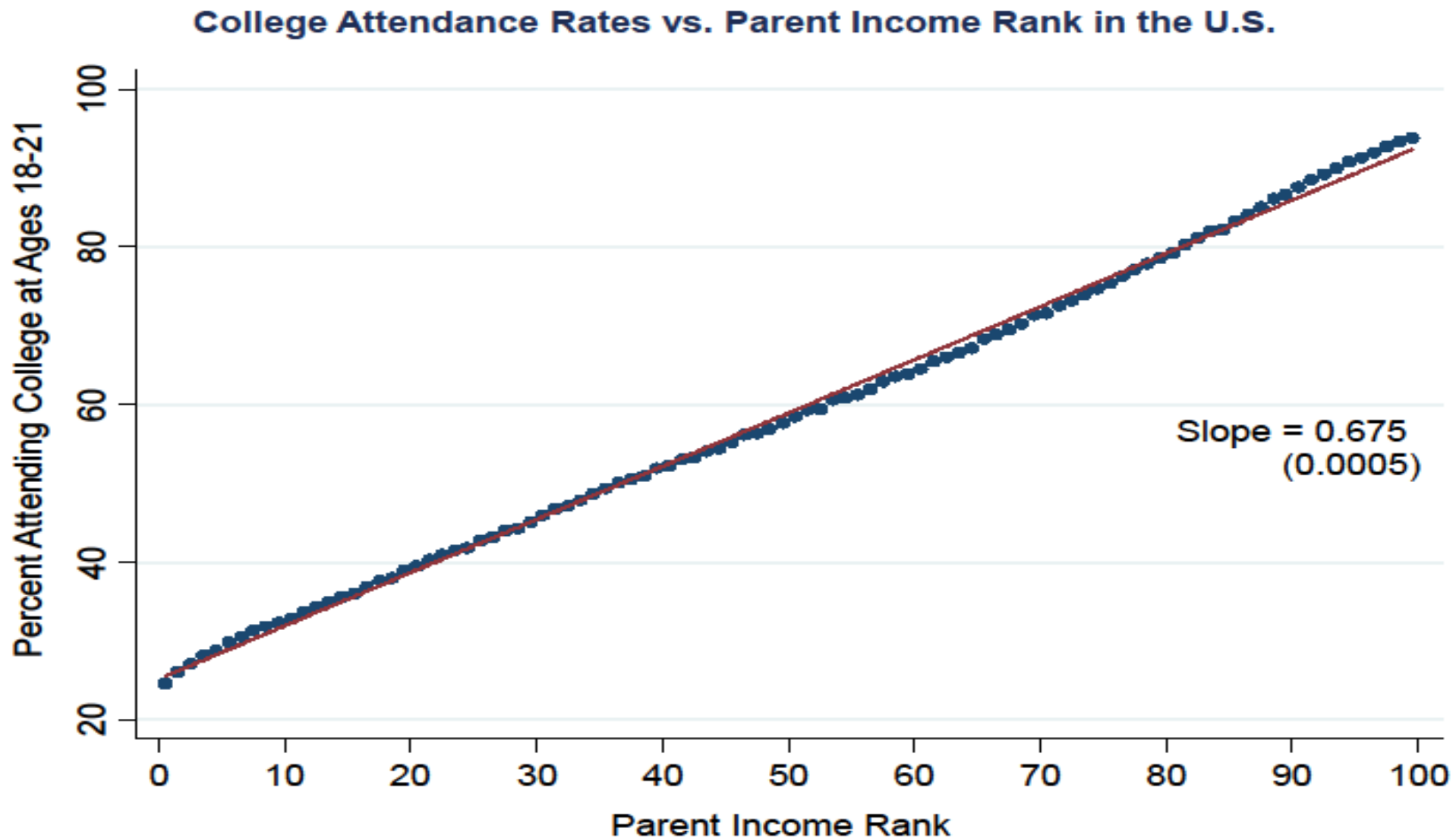


Source: World Inequality Report 2018, wir2018.wid.world

USA: The collapse of the bottom 50% income share

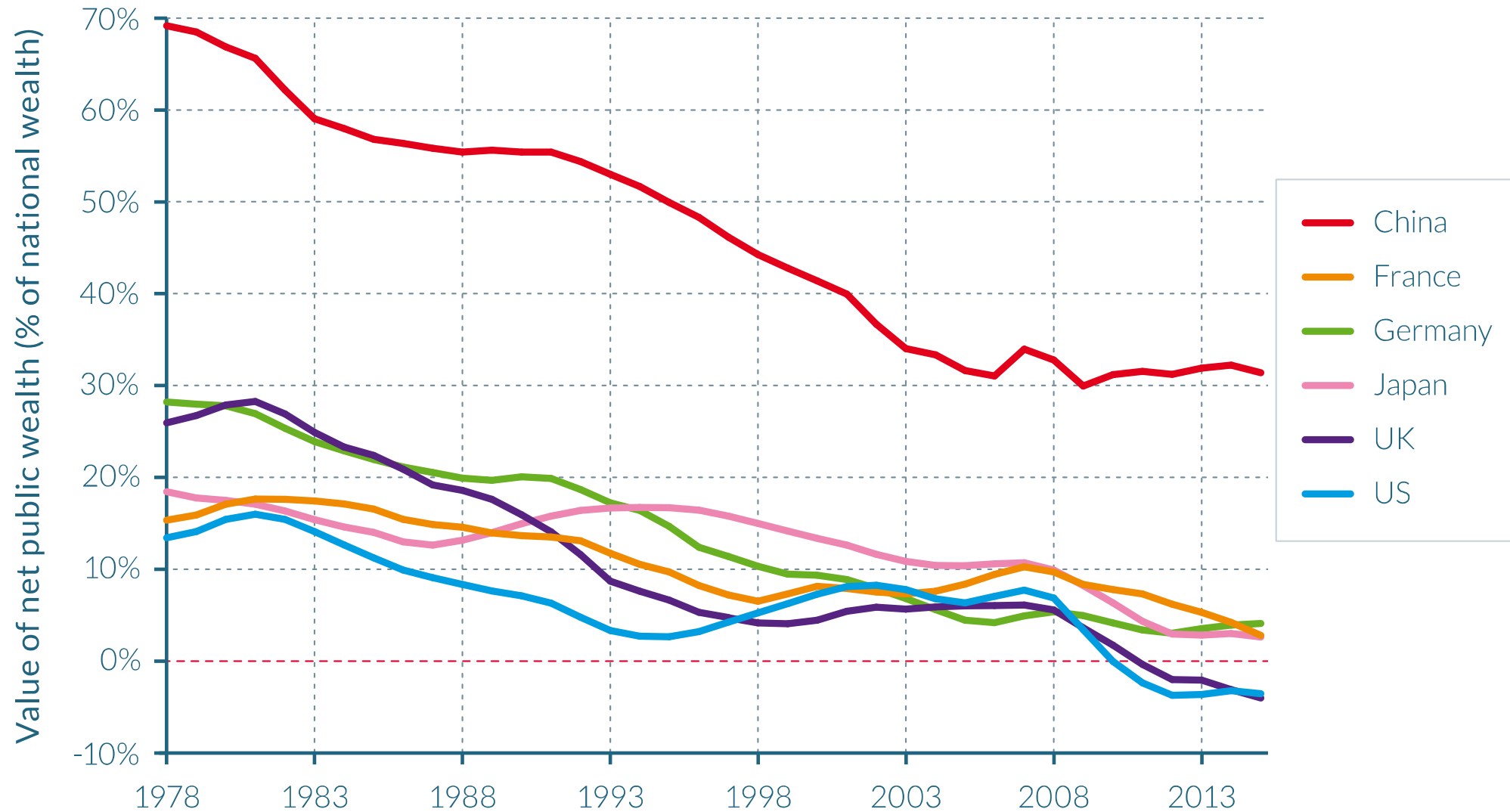


Rising inequality and unequal access to education



Source: Chetty-Saez et al, « The Equality of Opportunity Project », 2015

The fall of the share of net public wealth in net national wealth, 1978-2017



Source: World Inequality Report 2018, wir2018.wid.world

- **Why is rising inequality not leading to rising demand for redistribution?**
- **One possible explanation: globalisation & competition between countries make vertical redistribution more difficult to organize**
→ end of class-based redistributive politics, rise of identity-based conflict
- Certainly part of the explanation, but not enough: too mechanical. Nothing in globalization makes redistribution technically impossible.
- **Unequal globalization is a choice:** countries & governments choose to sign treaties with free trade/capital flows with no common redistributive taxation/regulation (though they might not always anticipate all consequences of what they sign); so where do these choices come from?
- **Some (ruling) groups must believe that the system is working fine, and that the benefits of competition between countries outweigh the costs**

- The pb with the median-voter model of elections is that it is far too simplistic and mechanical: **politics is about ideas and beliefs systems, not simply about conflicting interests and poor vs rich.**
- History of inequality is political and ideological. E.g. the history of progressive taxation in 20c involves sharp ideological reversals, unexpected political bifurcations, and unstable institutional tinkering

→ in order to analyze the future of redistribution, one first needs to better understand the changing multi-dimensional structure of political-ideological conflict about inequality & redistribution: we know very little

In « Brahmin Left vs Merchant Right: Rising Inequality and the Changing Structure of Political Conflict », I build long-run series on changing political cleavages in order to make some (limited) progress in this direction

(see piketty.pse.ens.fr/conflict)

What I do in this research

- **Main contribution is empirical/historical**
- **I construct long-run series on the changing structure of the electorate, i.e. who votes for which parties depending on different dimensions of inequality: income vs wealth vs education (also age, gender, religion, origins, etc.)**
- **Main data sources: (1) post-electoral surveys (available since 1940s-1950s); (2) local-level election results matched with census & other data (since 1800s)**
- **Today I present results for France-US-Britain 1948-2017 (post-electoral surveys)**
- **Currently being extended to Germany, Spain, Japan, Brasil, India, Poland, etc.**
- **Secondary contribution is theoretical:** I present simple two-dimensional models of inequality, beliefs & redistribution (vertical redistribution vs attitudes toward globalization/migration, i.e. domestic vs external inequality; inequality in education vs inequality in wealth) which can help interpret these findings

Main empirical finding: the rise of multiple-elite politics

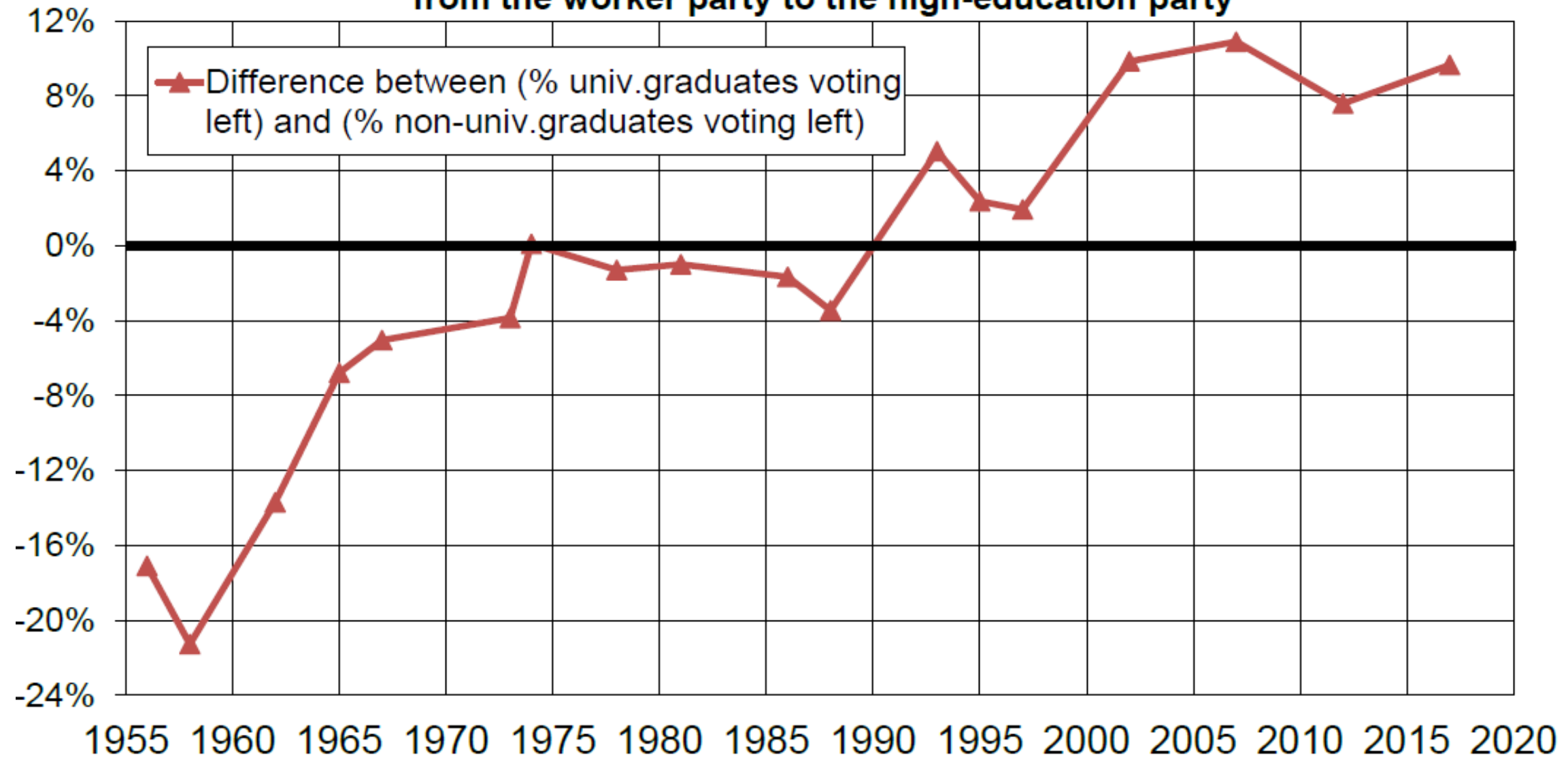
- **In the 1950s-60s**, the vote for left-wing (labour-socialist-democratic) parties in France-UK-US used to be associated with lower education & lower income voters: **class-based political conflict** (→ redistributive policies)
- It has gradually become associated since 1970s-80s with higher education voters, giving rise since 1990s-2000s to a **multiple-elite party system: high-education elites vote left, while high-income/high-wealth elites vote right. I.e. intellectual elite (Brahmin left) vs business elite (Merchant right).**

Can explain why redistributive issues have become less central.

Other groups might feel left behind → rise of populism?

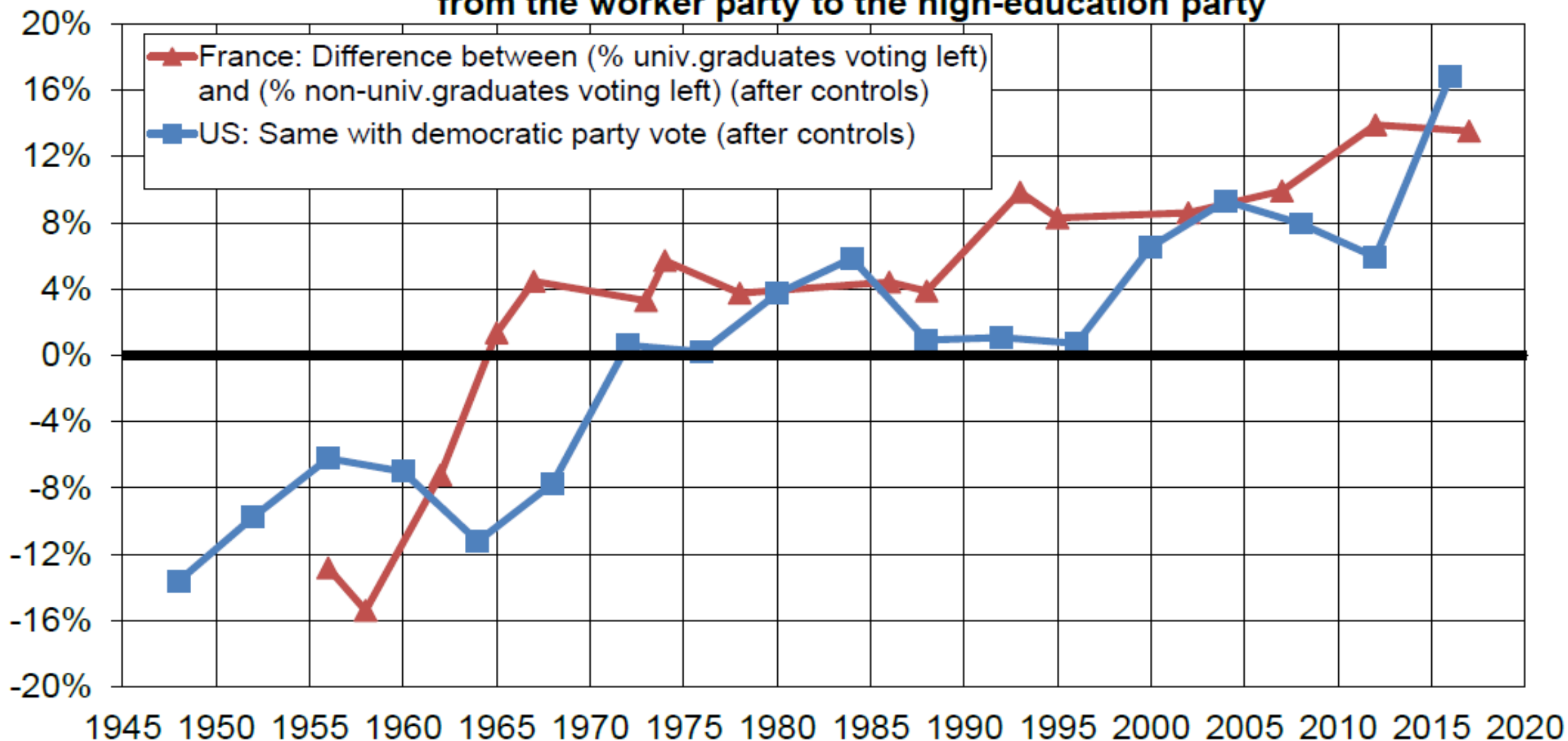
This evolution corresponds to a gradual decomposition of the postwar party system and opens up many uncertain possibilities for the future

Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left-wing parties (SFIO-PS, PCF, Rad., various left, green, extreme-left) obtain a score that is 17 points lower among university graduates than among non-university graduates; in 2012, their score is 8 points higher among graduates.

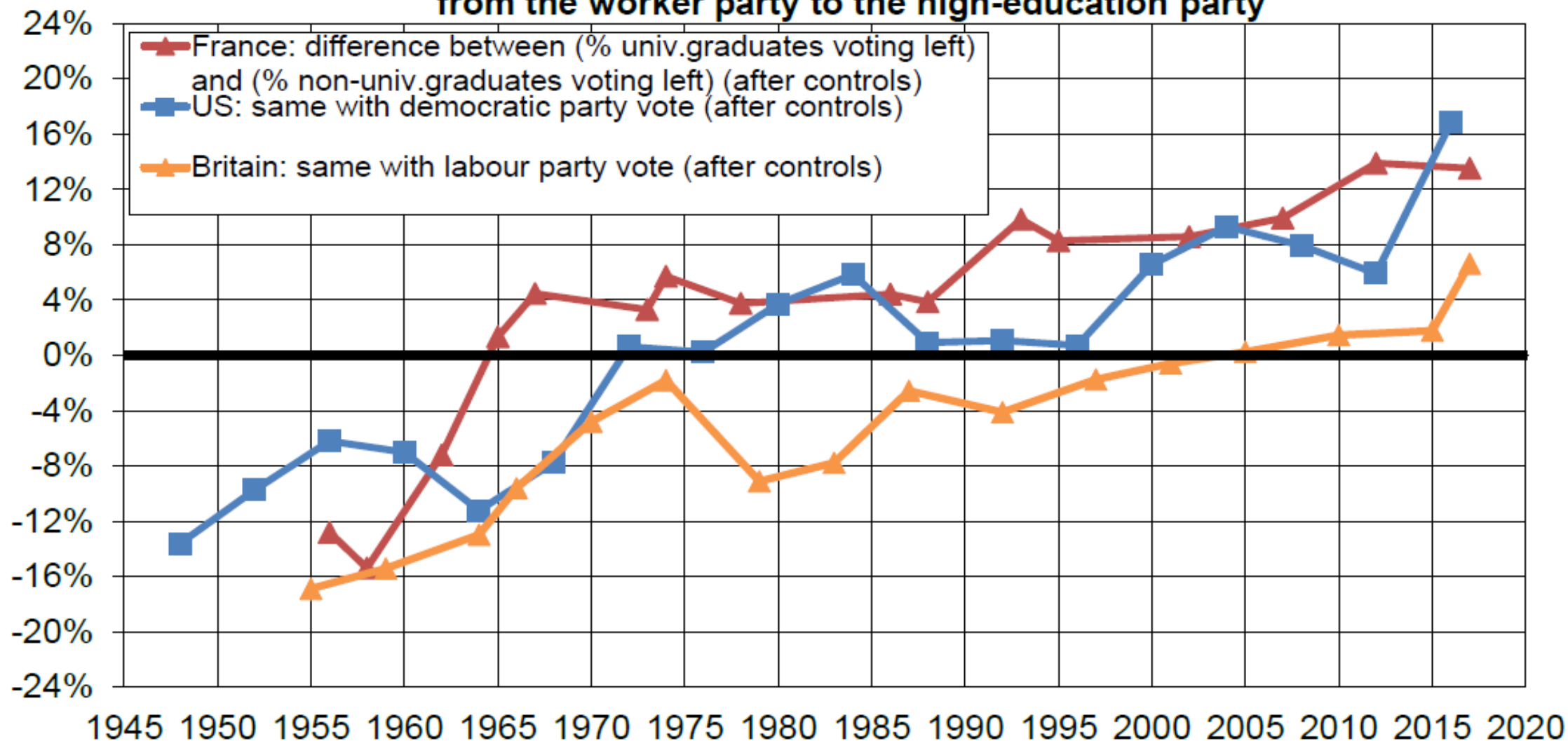
Voting for left-wing & democratic parties in France and the US, 1948-2017: from the worker party to the high-education party



Source: author's computations using French and US post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)

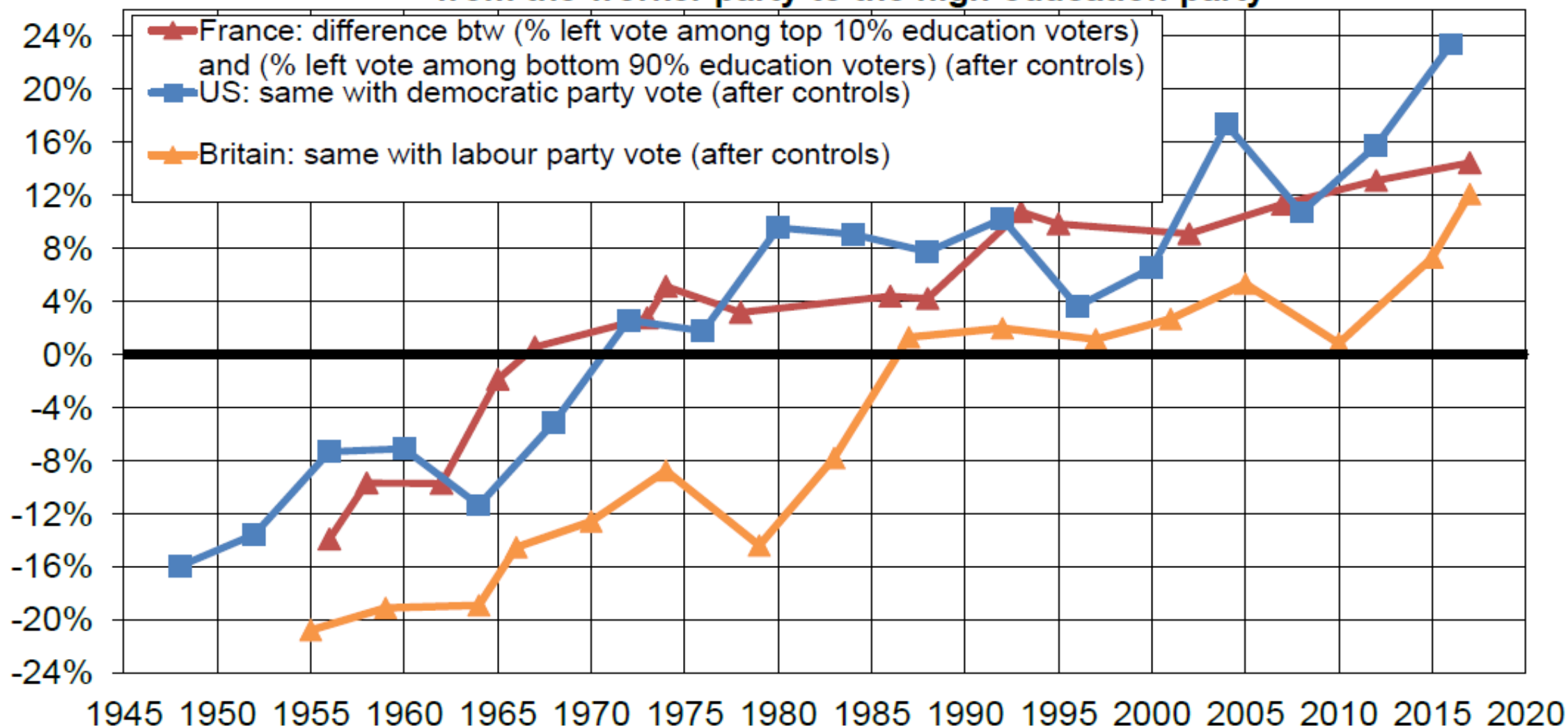
Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 14 points lower among university graduates than among non-university graduates in France; in 2012, their score is 13 points higher among university graduates (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for the democratic vote in the US.

Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



Source: author's computations using French, US and British post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., etc.) obtain a score that is 14 points lower among university graduates than among non-university graduates in France; in 2012, their score is 13 points higher among university graduates (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for democratic vote in the US and labour vote in Britain.

Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



Source: author's computations using French, US and British post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left parties (SFIO-PS, PC, Rad., etc.) obtain a score that is 14 points lower among top 10% education voters than among bottom 90% education voters in France; in 2012, their score is 13 points higher among top 10% educ.voters (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for democratic vote in the US and labour vote in Britain.

- **High-education & high-income voters might also unite in the future, giving rise to a complete realignment of the party system: « globalists » (high-education, high income) vs « nativists » (low-education, low-income).** Like in **US 2016/FR 2017**: temporary or new normal? Like in post-communist Europe, due to discouraged left?
- **Other possibility: a return to « normal » class-based conflict** (socialist-internationalist party vs business-nationalist party) is also possible (**UK 2017?**), but this would require a new form of internationalist/egalitarian platform.
- **Otherwise new redistributive platform might also come from nativist/racist side.** Like in US 19c-20c: Democrats gradually shifted from slavery party to the party of the poor whites in late 19c, the New Deal party in mid-20c, and finally the party of the rich whites and the poor minorities in late 20c-early 21c. This seems exotic from a European 19c-20c party-system perspective, but maybe relevant for Europe 21c.
- There's nothing particularly « normal » in the internationalist/egalitarian alignment: it was due to particular circumstances (Great Depression, WW2, rise of Communism, end of colonialism, etc.) and powerful unifying ideology.
- **Aim of this research is not to predict future, but rather to illustrate the complexity of on-going evolutions. With many-dimensional conflict, multiple bifurcations are possible. Political actors and strategies matter.**

Organization of the (rest of the) presentation

1. Evidence from French post-electoral surveys 1956-2017

2. Evidence from US post-electoral surveys 1948-2016

3. Evidence from British post-electoral surveys 1955-2017

4. Open questions: multiple-elite stabilization, or shift to globalists-vs-nativists cleavage, or return to class-based conflict, or rise of nativist left?

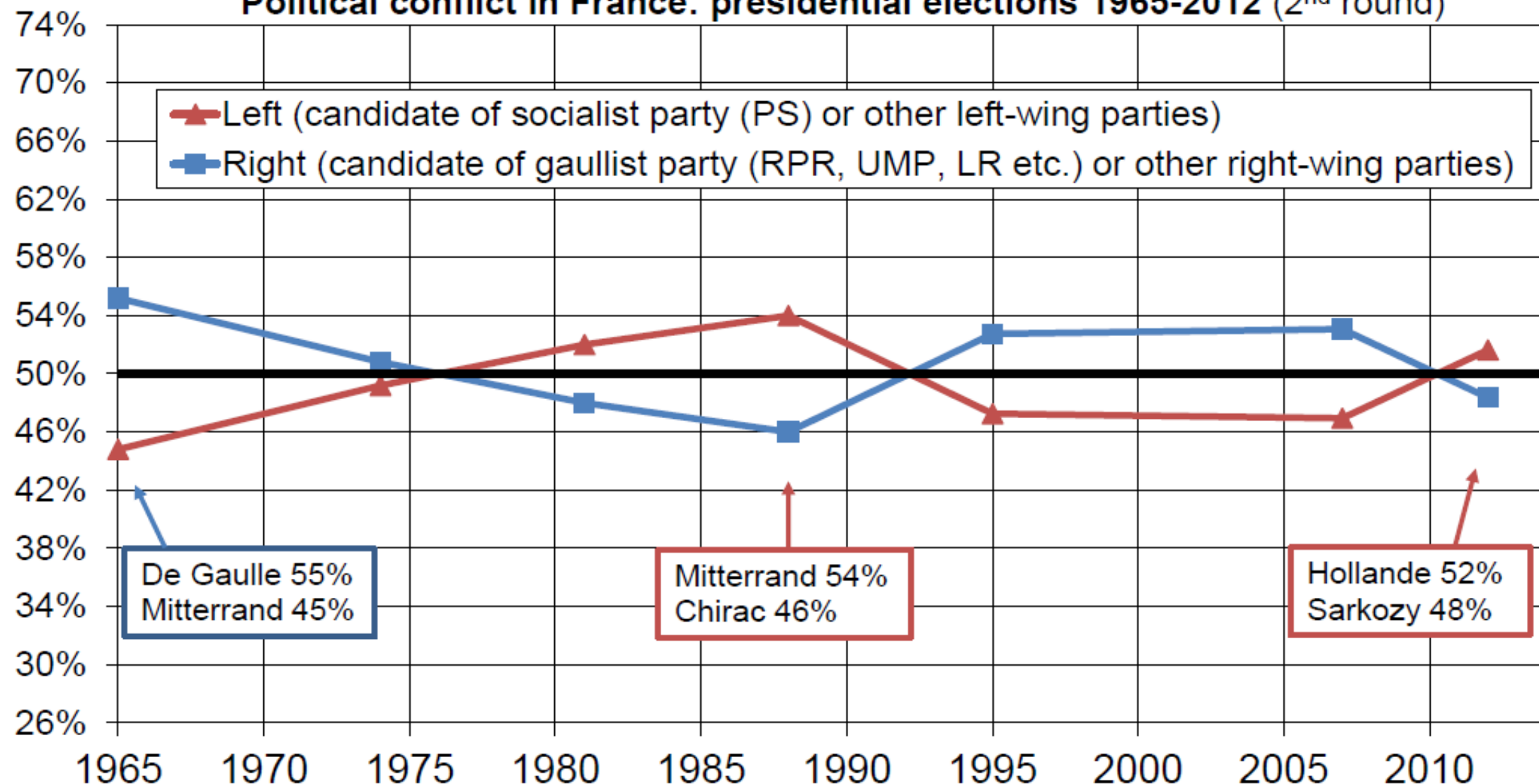
(5. Two-dimensional models of inequality and redistribution) (domestic vs external inequality; education vs income/wealth) (building on « Social Mobility and Redistributive Politics », QJE 1995) (Not today)

(6. Next steps. 19c-20c series. Other countries.) (Not today)

1. Evidence from France

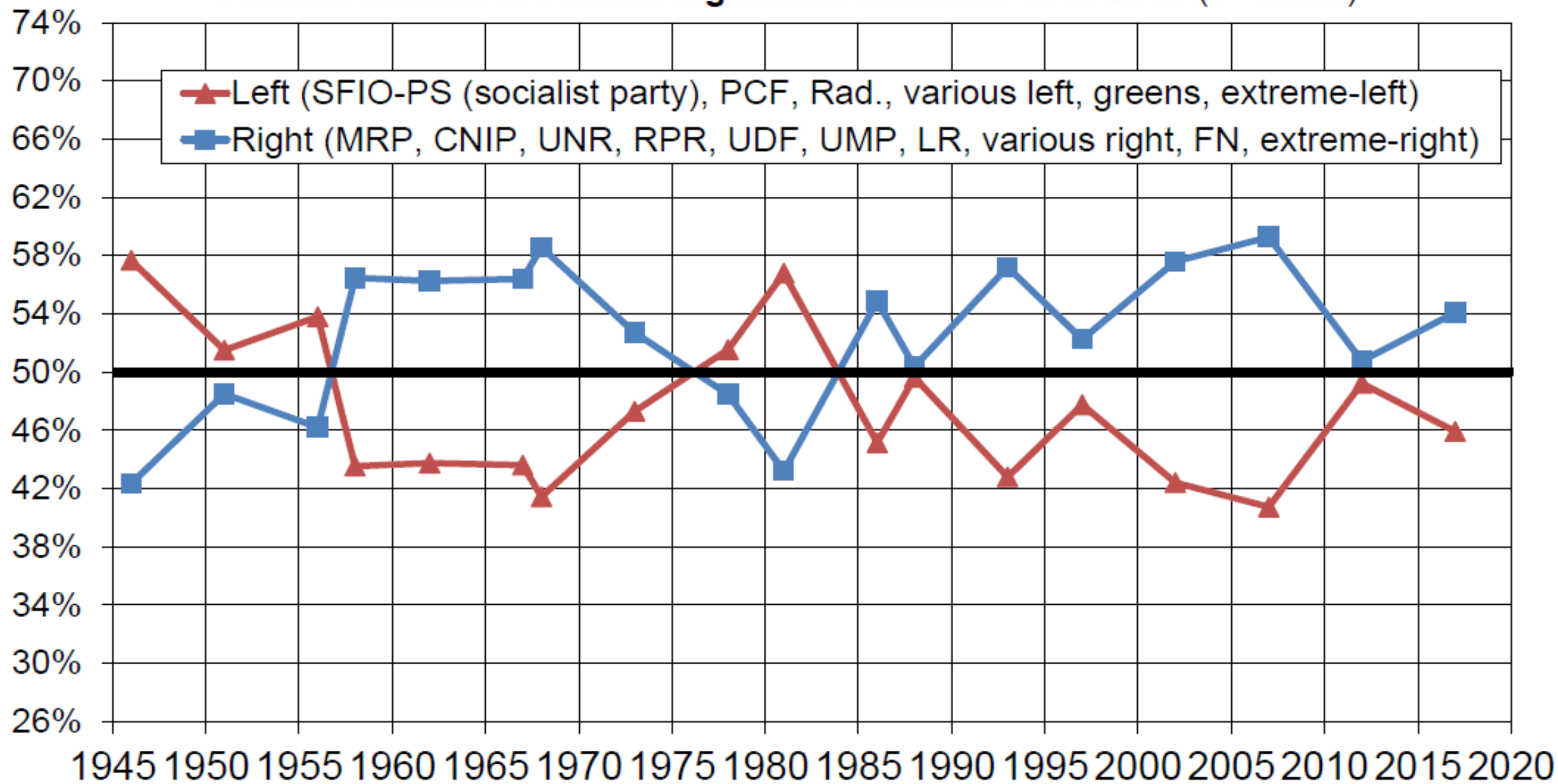
- Long tradition of post-electoral surveys: 1958, 1962, 1967, 1968, 1973, 1974, 1978, 1981, 1988, 1995, 1997, 2002, 2007, 2012, 2017
- Typically about 4000 observations/survey, with dozens of questions on income/education/wealth (& religion/foreign origins in recent surveys)
- Micro-files are available for most surveys
- I start by presenting results on changing voting patterns by **education**, then **income**, then **wealth**, and finally **religion/foreign origins**

Political conflict in France: presidential elections 1965-2012 (2nd round)



Vote shares in presidential second rounds opposing left and right: 1965 (De Gaulle 55%, Mitterrand 45%), 1974 (Giscard 51%, Mitterrand 49%), 1981 (Mitterrand 52%, Giscard 48%), 1988 (Mitterrand 54%, Chirac 46%), 1995 (Chirac 53%, Jospin 47%), 2007 (Sarkozy 53%, Royal 47%), 2012 (Hollande 52%, Sarkozy 48%). Other second rounds (opposing right, extreme-right and center) were not represented here: 1969 (Pompidou 58%, Poher 42%), 2002 (Chirac 82%, Le Pen 18%), 2017 (Macron 66%, Le Pen 34%).
 Source: see piketty.pse.ens.fr/conflict.

Political conflict in France: legislative elections 1946-2017 (1st round)

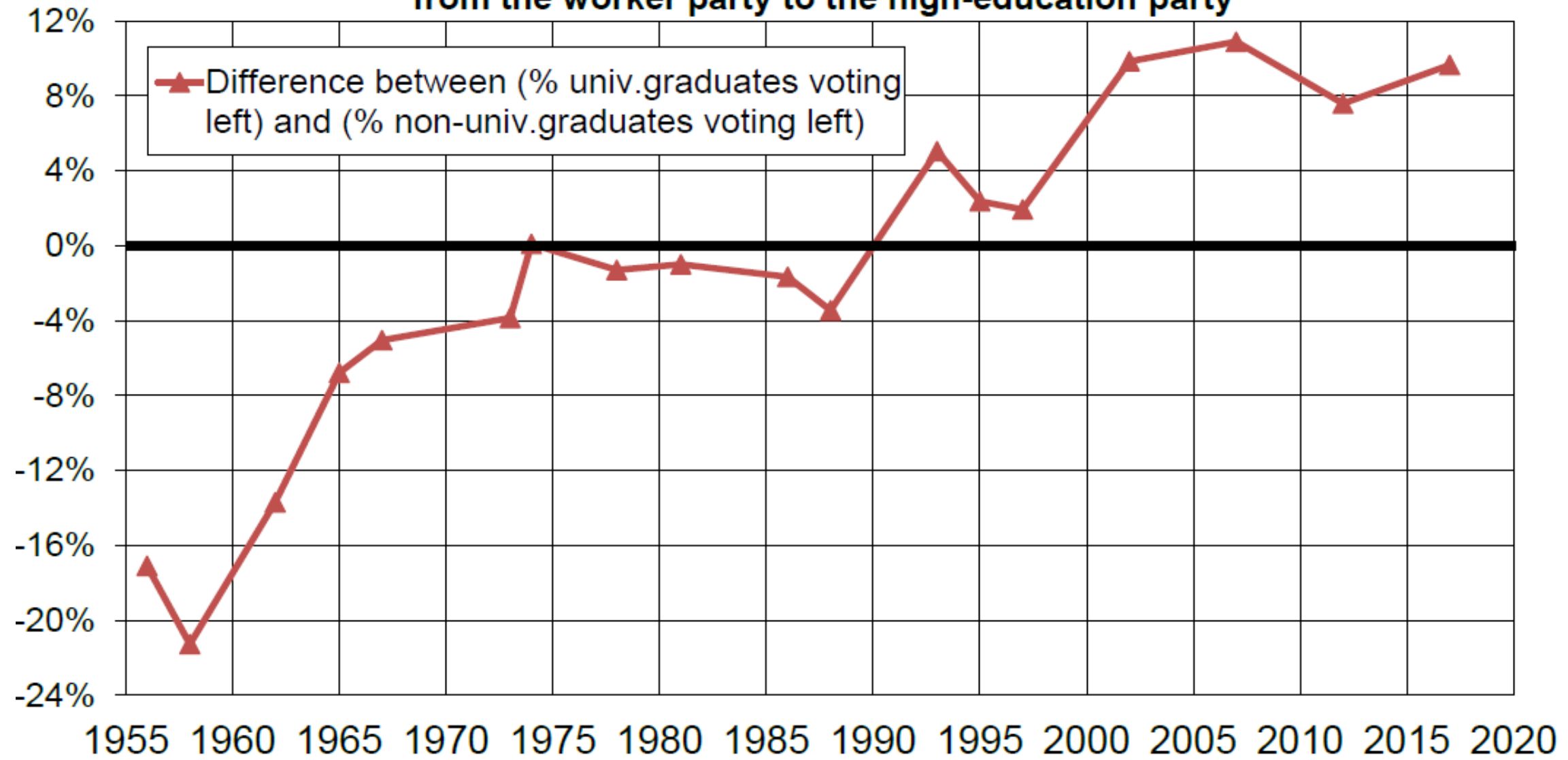


Vote shares in legislative elections 1956-2017 (1st round), excluding other parties (regionalists, etc.). The vote share obtained in 2017 by centrist LRM-Modem alliance (32%) was split 50-50 between center-right and center-left.

Source: see piketty.pse.ens.fr/conflict.

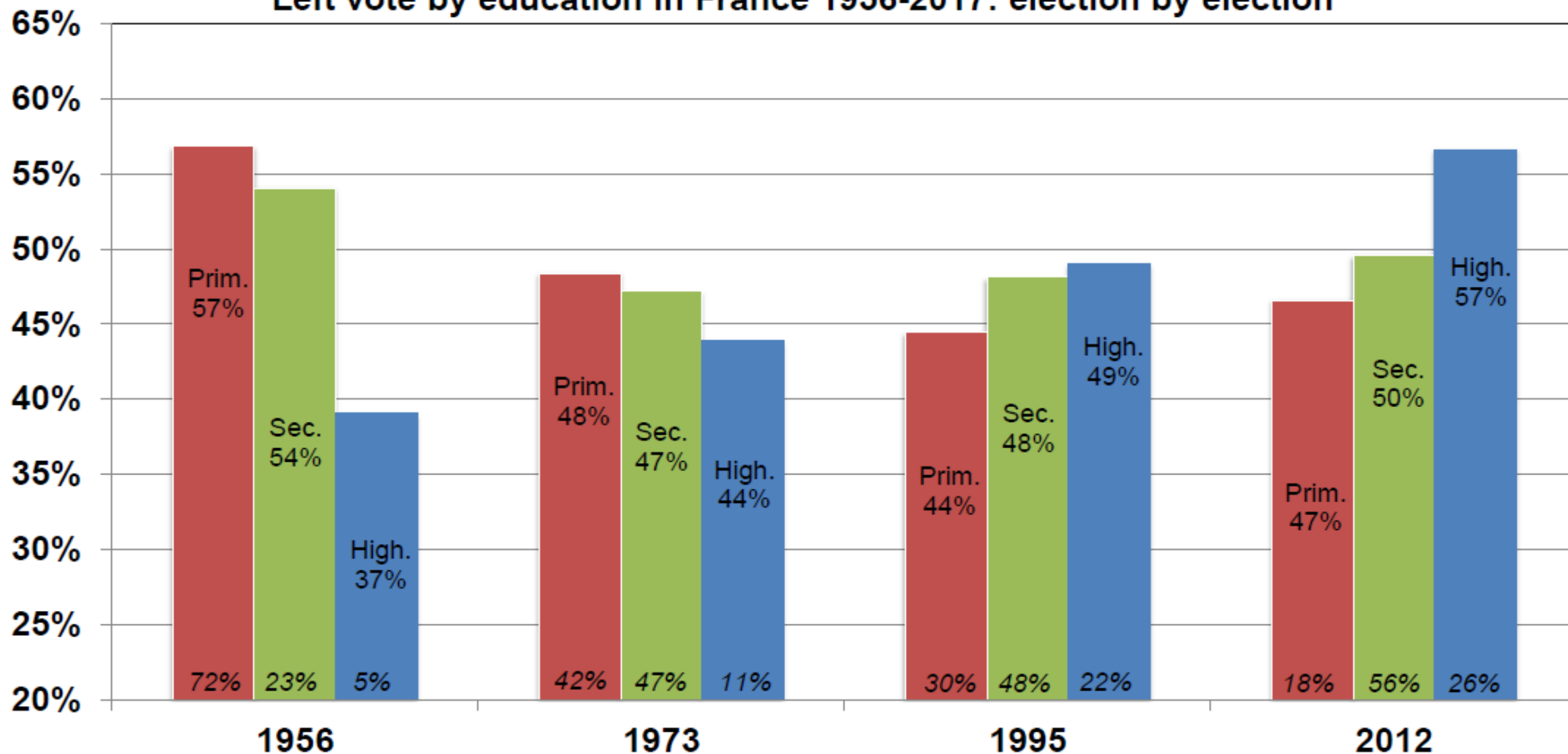
- **Key finding: reversal of the education cleavage**
- **Complete reversal of education gradient over 1956-2017 period.**
At the beginning of the period, the more educated, the more right-wing.
At the end of the period, the more educated, the more left-wing.
- **Highly significant. Robust to controls.**
- $\text{left}_{it} = \alpha + \beta_t \text{higheduc}_{it} + \gamma_{ct} c_{it} + \varepsilon_{it}$
 $\text{left}_{it} = 1$ if left-wing vote, 0 if right-wing vote
 $\text{higheduc}_{it} = 1$ if higher education degree, 0 otherwise
 c_{it} = control variables (age, sex, family situation, income, wealth, father's occupation, etc.)
- With no controls: $\beta_t = E(\text{left}_{it}=1, \text{higheduc}_{it}=1) - E(\text{left}_{it}=1, \text{higheduc}_{it}=0)$
- Gradually adding the control variables: no impact on trend (level is affected, not the trend)

Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left-wing parties (SFIO-PS, PCF, Rad., various left, green, extreme-left) obtain a score that is 17 points lower among university graduates than among non-university graduates; in 2012, their score is 8 points higher among graduates.

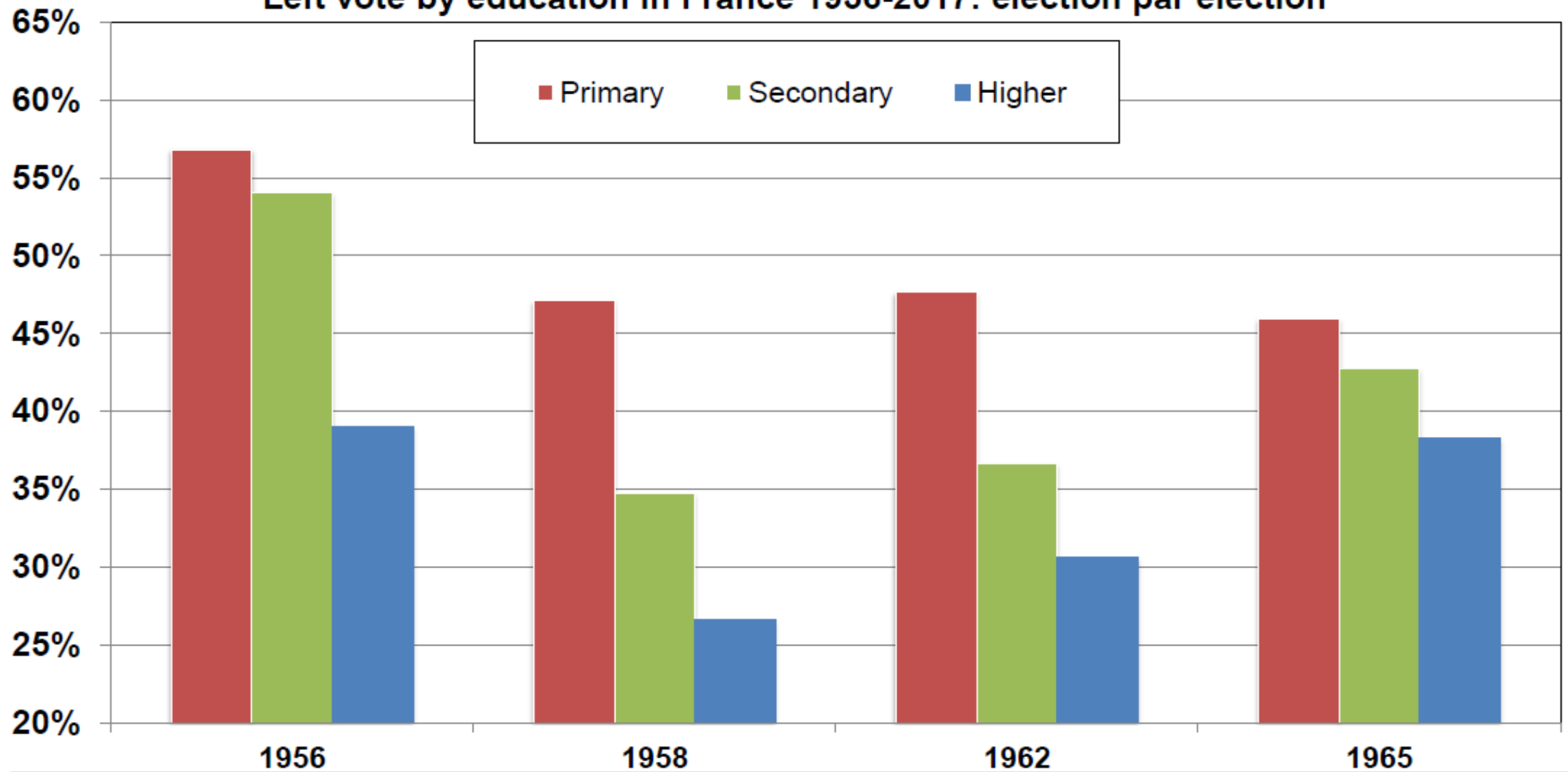
Left vote by education in France 1956-2017: election by election



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left parties (SFIO-PS, PCF, Rad., etc.) obtain 57% of the vote among voters with no degree (other than primary), 54% among voters with secondary degrees (Bac, Brevet, Bep, etc.) and 37% among university graduates (higher education). In 2012, the left candidate (Hollande) obtains 47% of the vote among voters with no degree and 57% among university graduates.

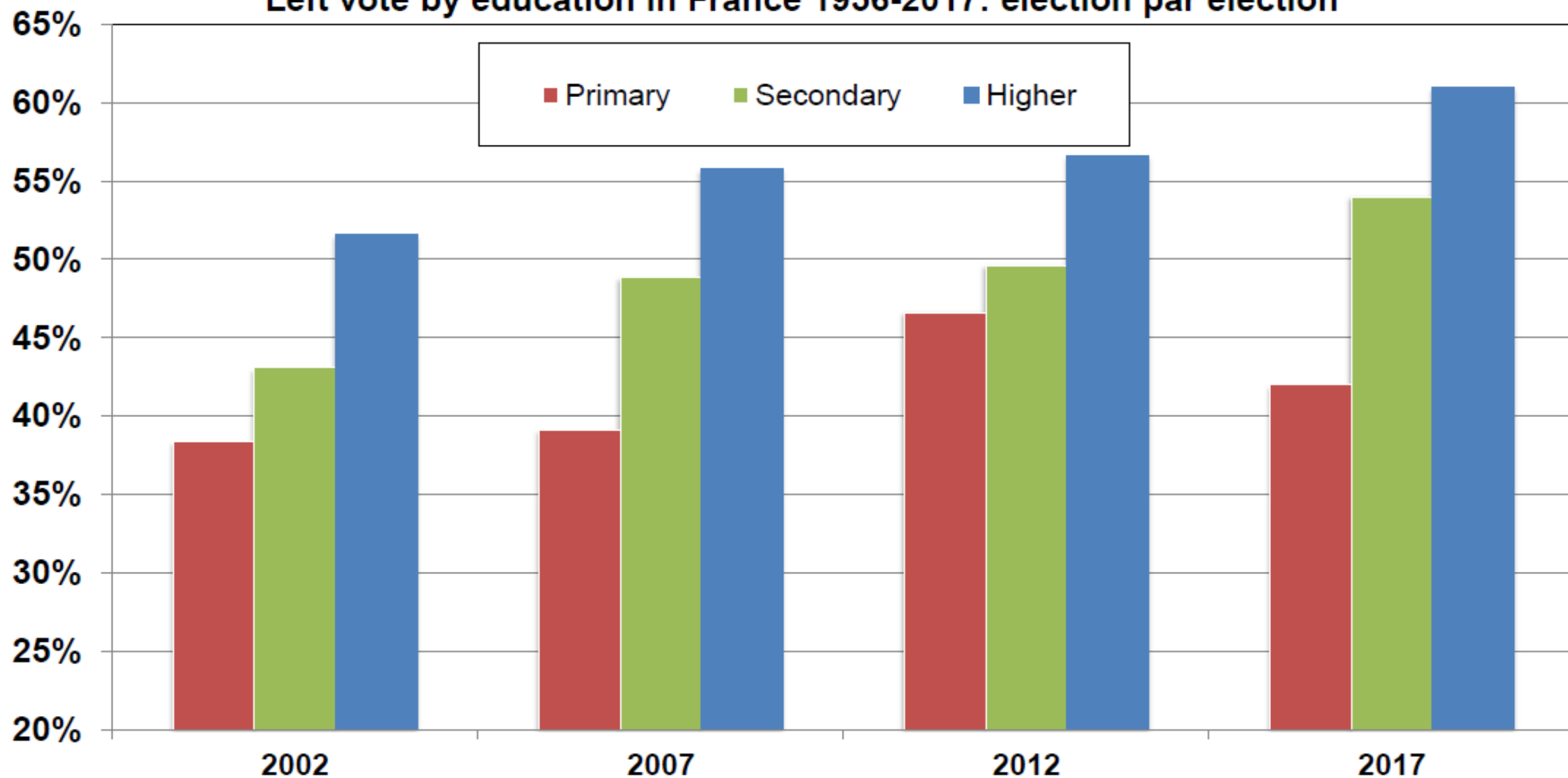
Left vote by education in France 1956-2017: election par election



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left parties (SFIO-PS, PCF, Rad., etc.) obtain 57% of the vote among voters with no degree (other than primary), 54% among voters with secondary degrees (Bac, Brevet, Bep, etc.) and 37% among university graduates (higher education).

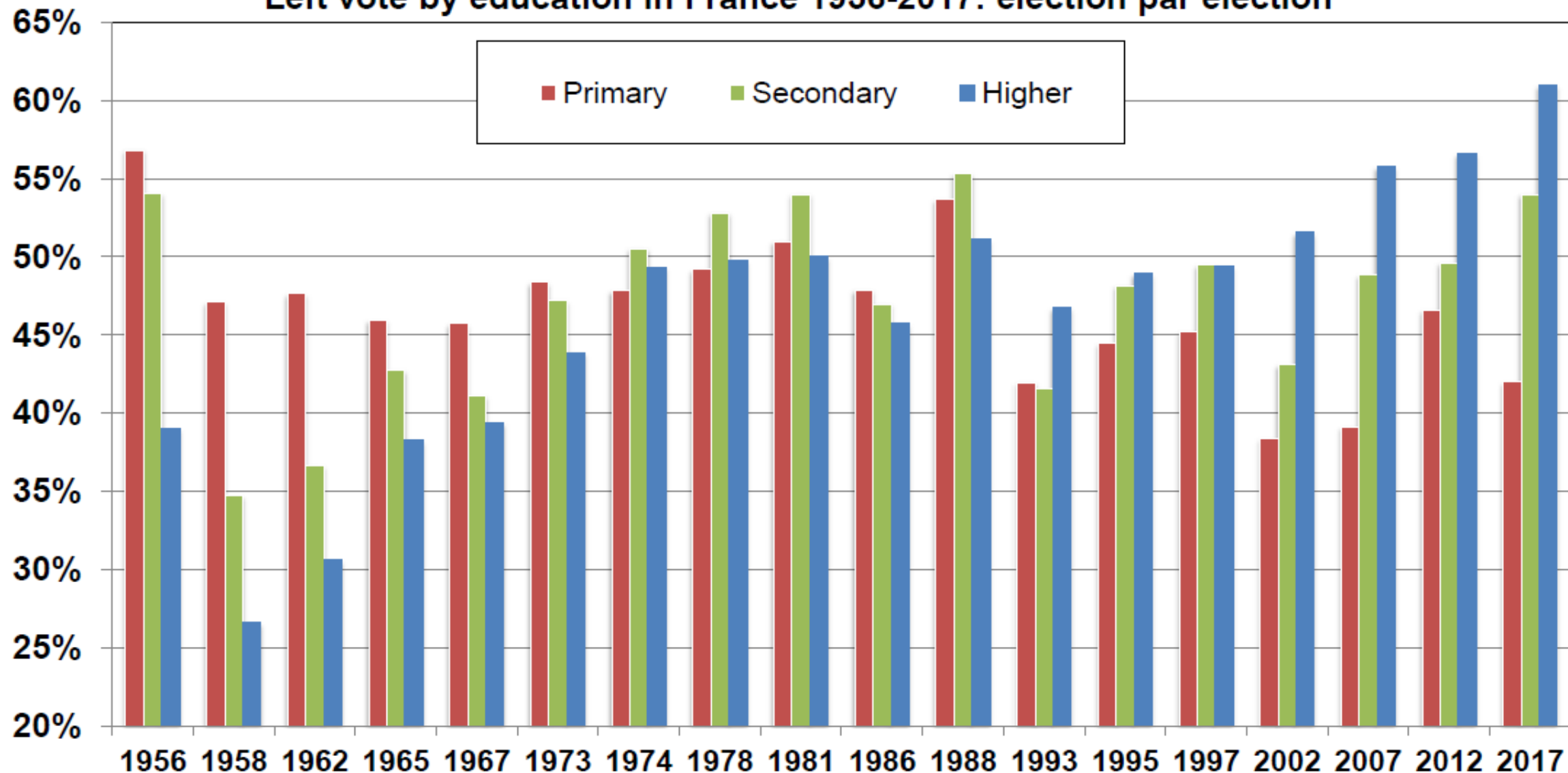
Left vote by education in France 1956-2017: election par election



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left candidate (Hollande) obtains 47% of the vote among voters with no degree (other than primary), 50% among voters with secondary degrees (Bac, Brevet, Bep, etc.) and 57% among university graduates (higher education).

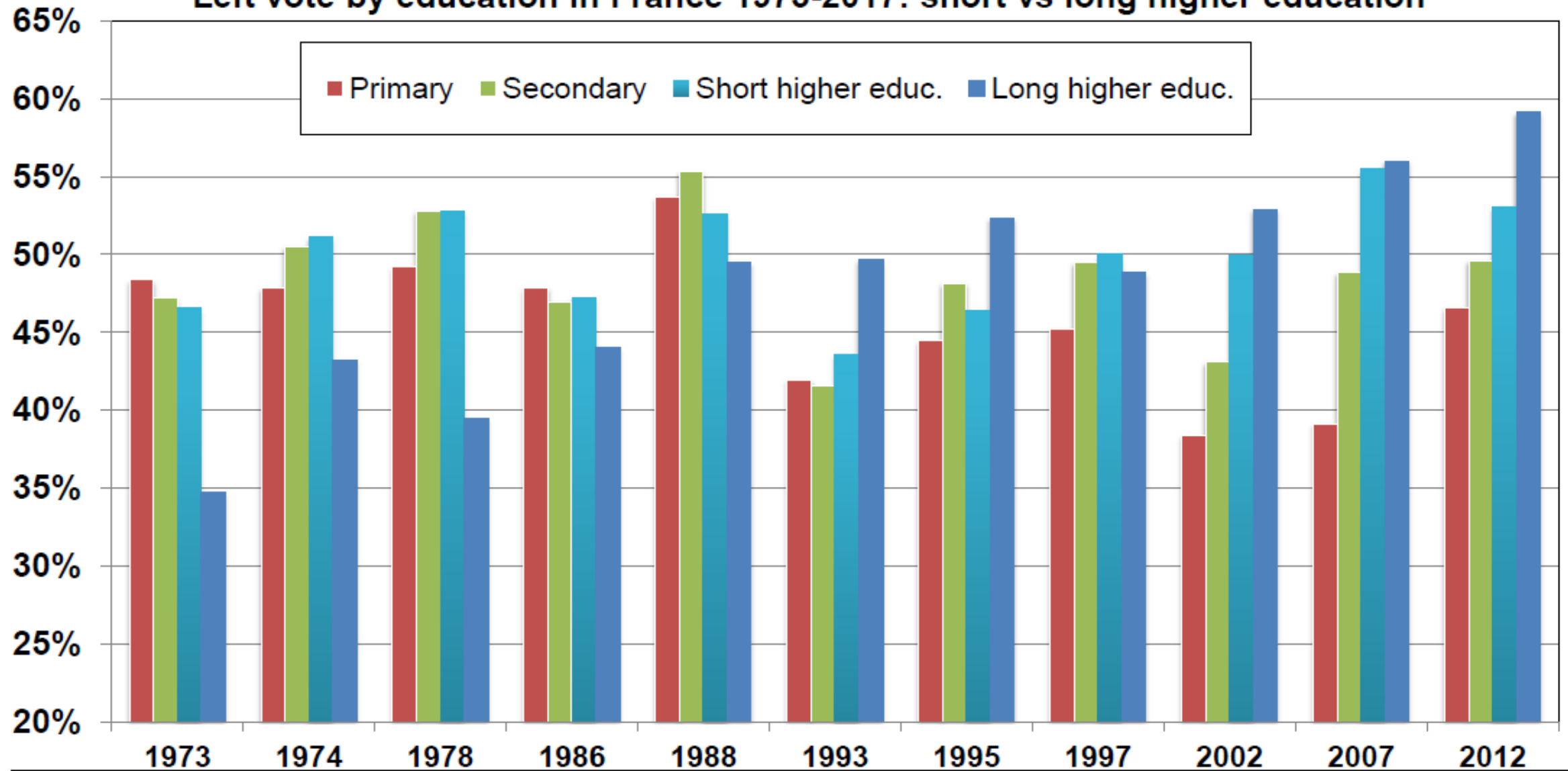
Left vote by education in France 1956-2017: election par election



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left parties (SFIO-PS, PCF, Rad., etc.) obtain 57% of the vote among voters with no degree (other than primary), 54% among voters with secondary degrees (Bac, Brevet, Bep, etc.) and 37% among university graduates (higher education).

Left vote by education in France 1973-2017: short vs long higher education

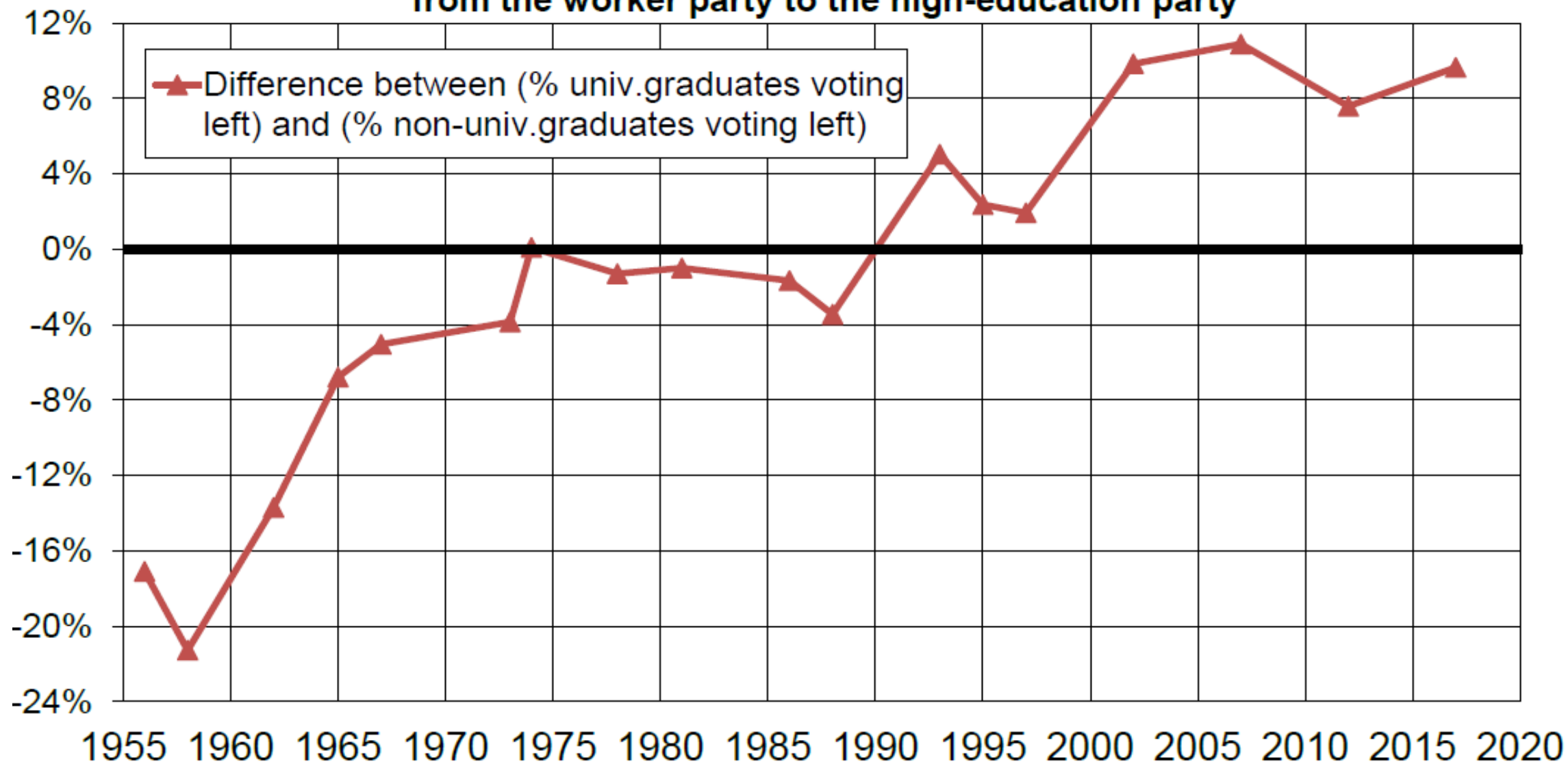


Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left candidate (Hollande) obtains 47% of the vote among voters with no degree (except primary), 50% among voters with secondary degrees, 53% among voters with short higher education and 59% among voters with long higher education.

Note: 1973-1978, short high. = university, long high. = grande école. 1986-2012: short high. = bac+2, long high. = bac+3 or more.

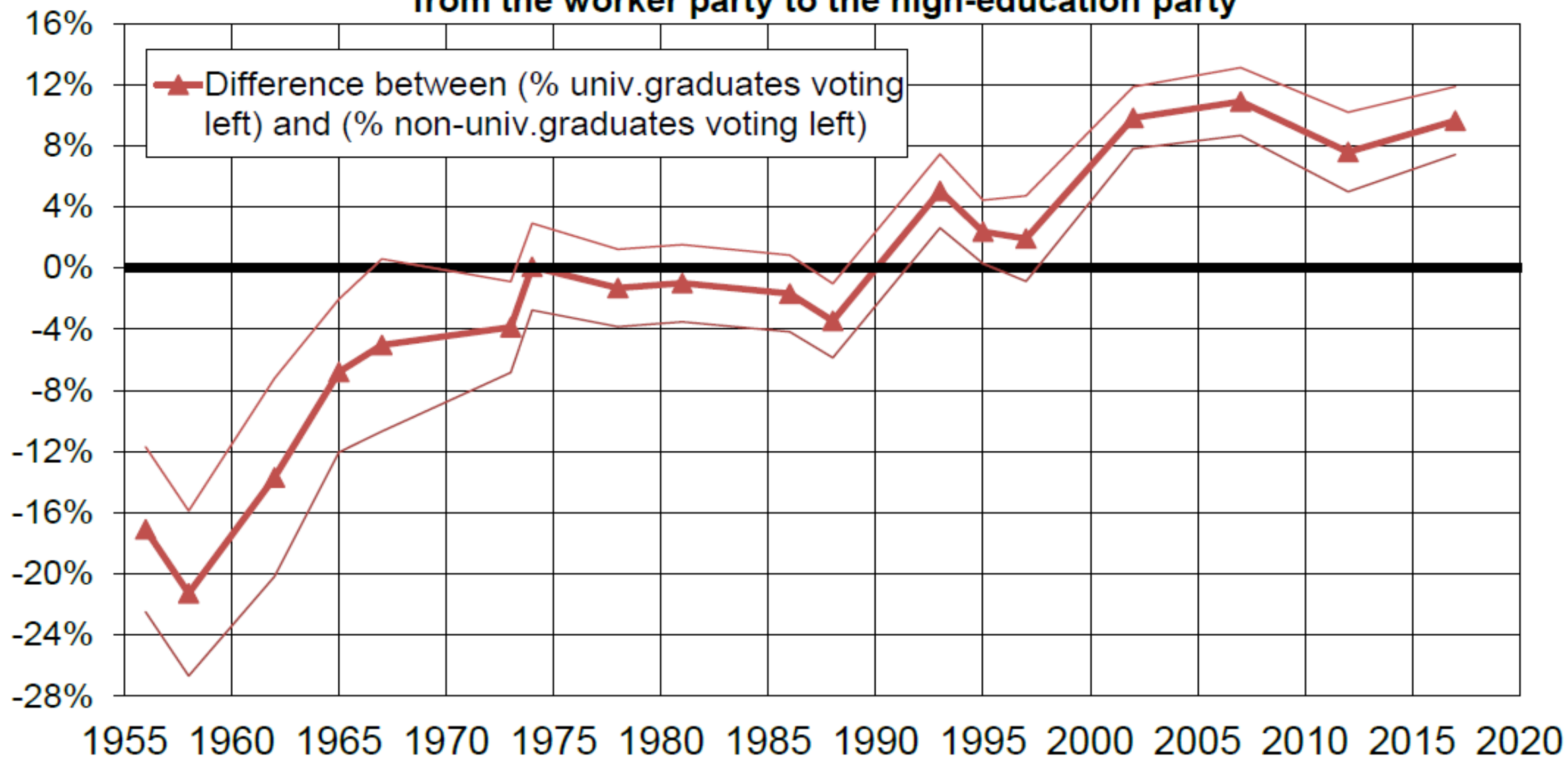
Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left-wing parties (SFIO-PS, PCF, Rad., various left, green, extreme-left) obtain a score that is 17 points lower among university graduates than among non-university graduates; in 2012, their score is 8 points higher among graduates.

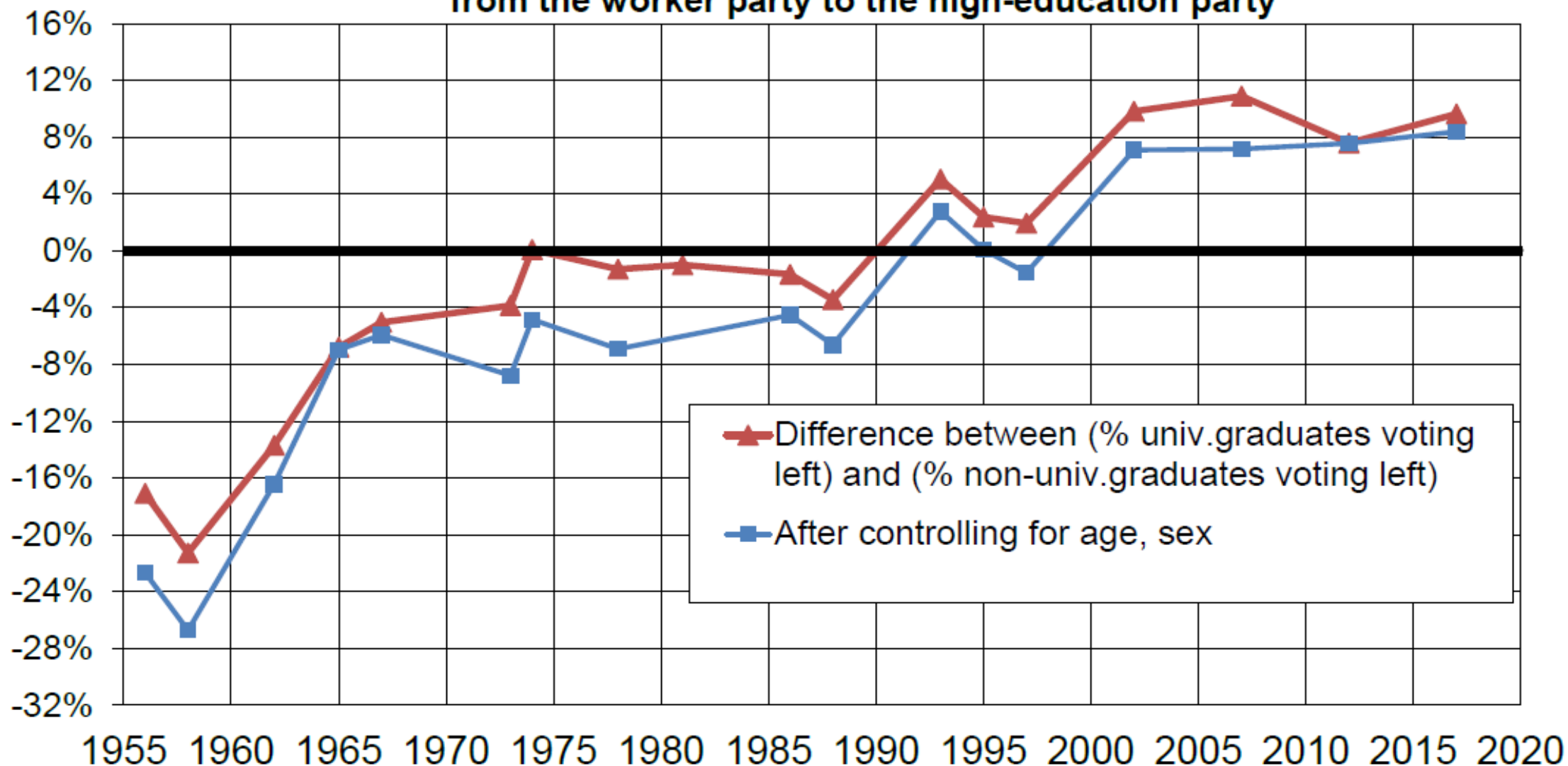
Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: in 1956, left parties (SFIO-PS, PCF, Rad., etc.) obtain a score that is 17 points lower among univ. graduates than among non-univ. graduates; in 2012, their score is 8 points higher among graduates. Fine lines indicate confidence intervals (90% level).

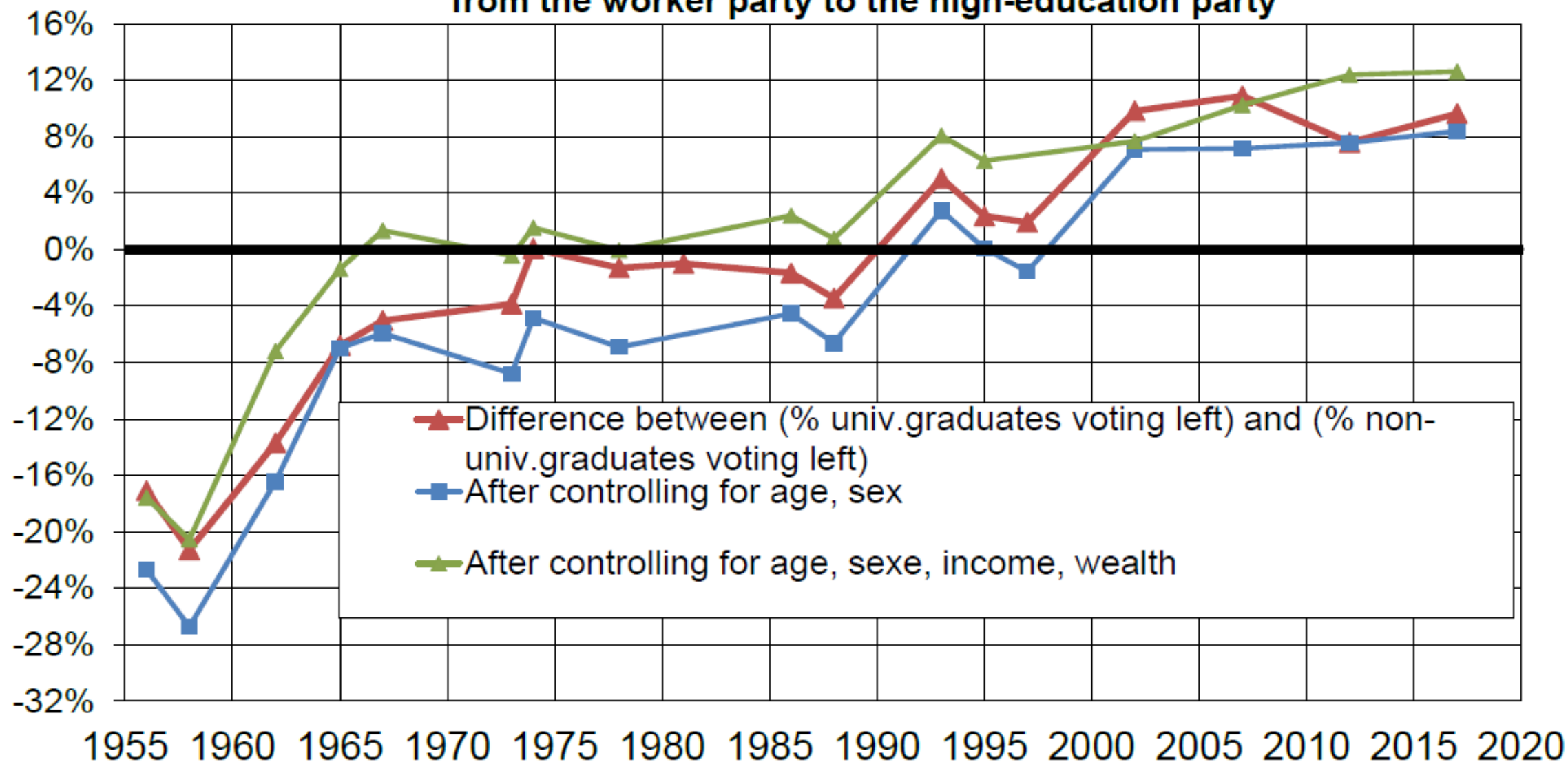
Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: in 1956, left parties obtain a score that is 17 point lower among univ. graduates than among non-univ. graduates; in 2012, their score is 8 points higher among university graduates. Including control variables does not affect the trend (only the level).

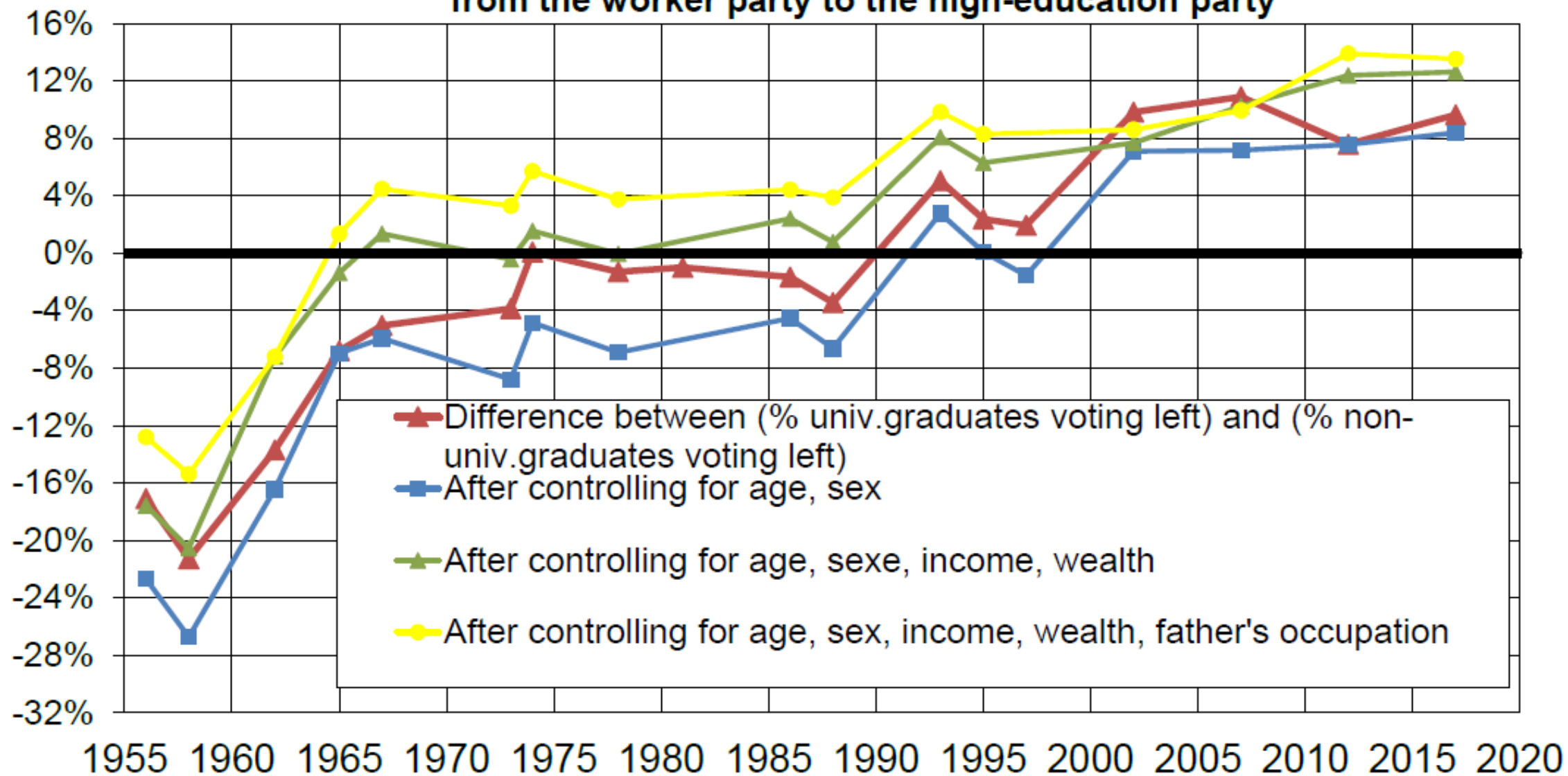
Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: in 1956, left parties obtain a score that is 17 point lower among univ. graduates than among non-univ. graduates; in 2012, their score is 8 points higher among university graduates. Including control variables does not affect the trend (only the level).

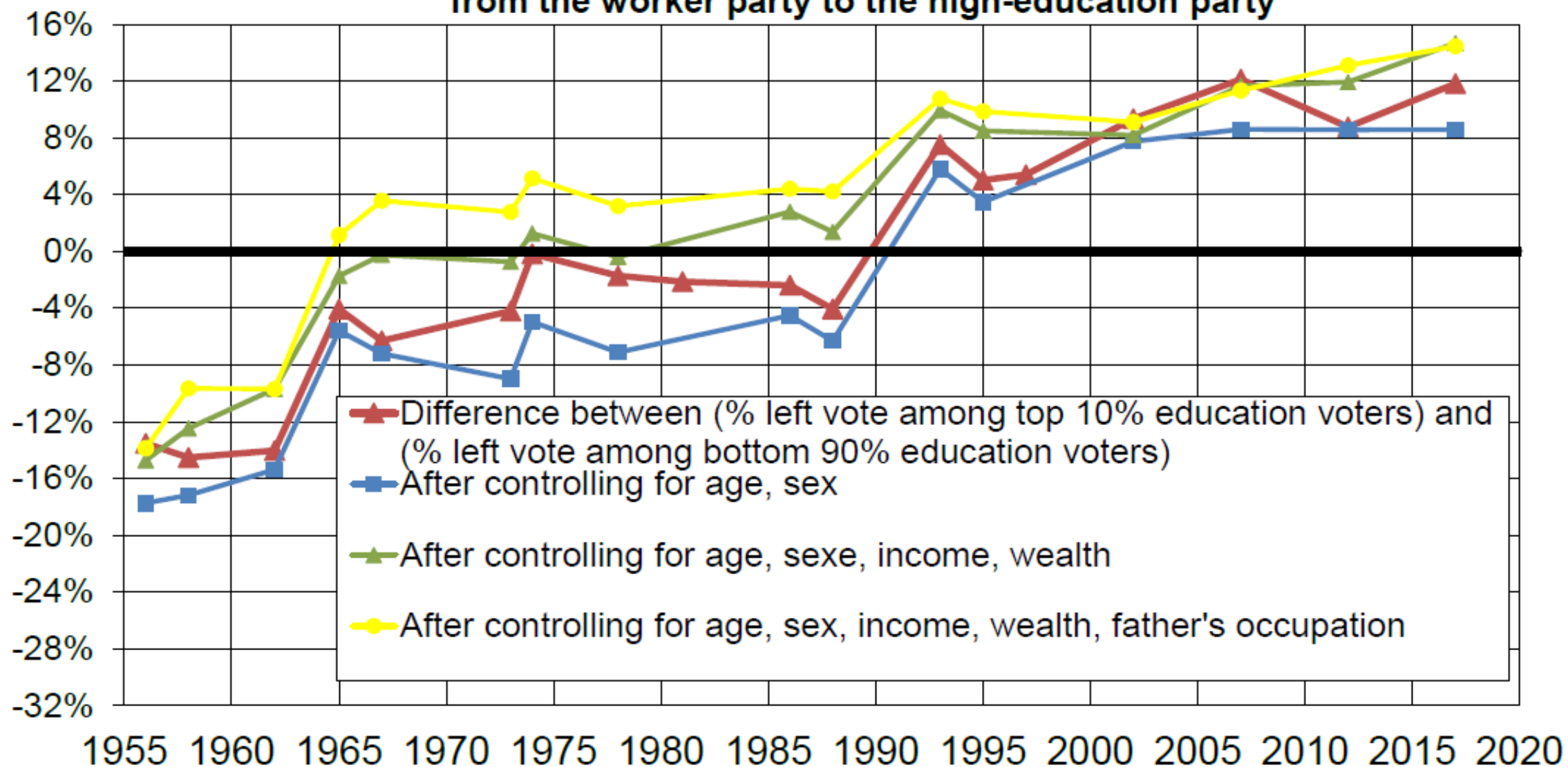
Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: in 1956, left parties obtain a score that is 17 point lower among univ. graduates than among non-univ. graduates; in 2012, their score is 8 points higher among university graduates. Including control variables does not affect the trend (only the level).

Left-wing vote in France, 1956-2017: from the worker party to the high-education party



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: in 1956, left parties obtain a score that is 14 point lower among top 10% education voters; in 2012, their score is 9 points higher among top 10% education voters. Including control variables does not affect the trend (only the level).

- I now present changing voting patterns by **income and wealth deciles**

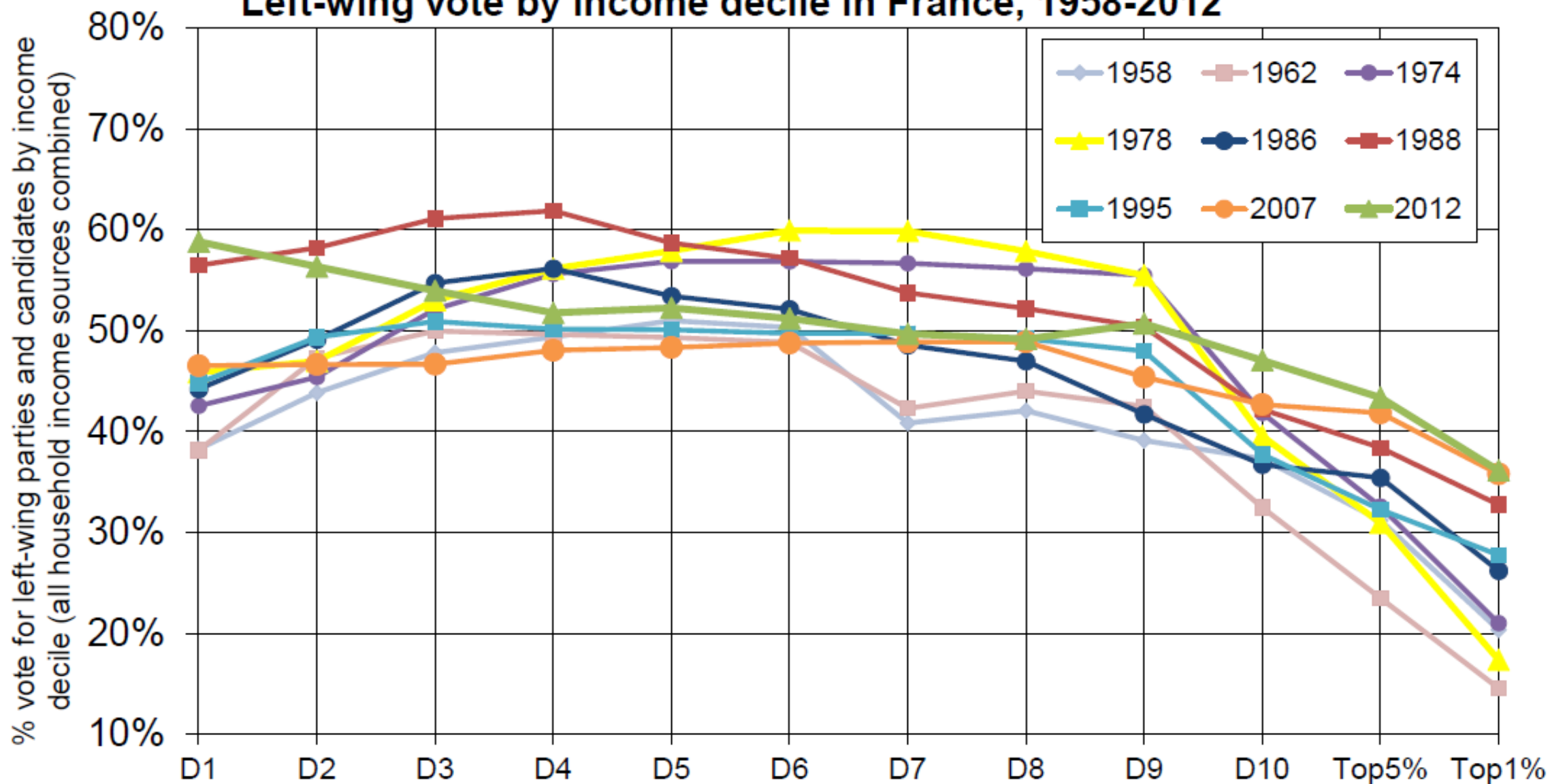
- The income-profile of left-vs-right vote has always been relatively flat within the bottom 90% (multiple compensating effects: young vs old, urban vs rural, self-employed vs wage-earners, public vs private etc.), but strongly downward-sloping at the level of top 10%

→ **look at top 10% income vs bottom 90% income voting patterns**

- The wealth-profile has always been much stronger than the income profile: inequality in property and wealth more important than inequality in income

→ **look at top 10% wealth vs bottom 90% wealth voting patterns**

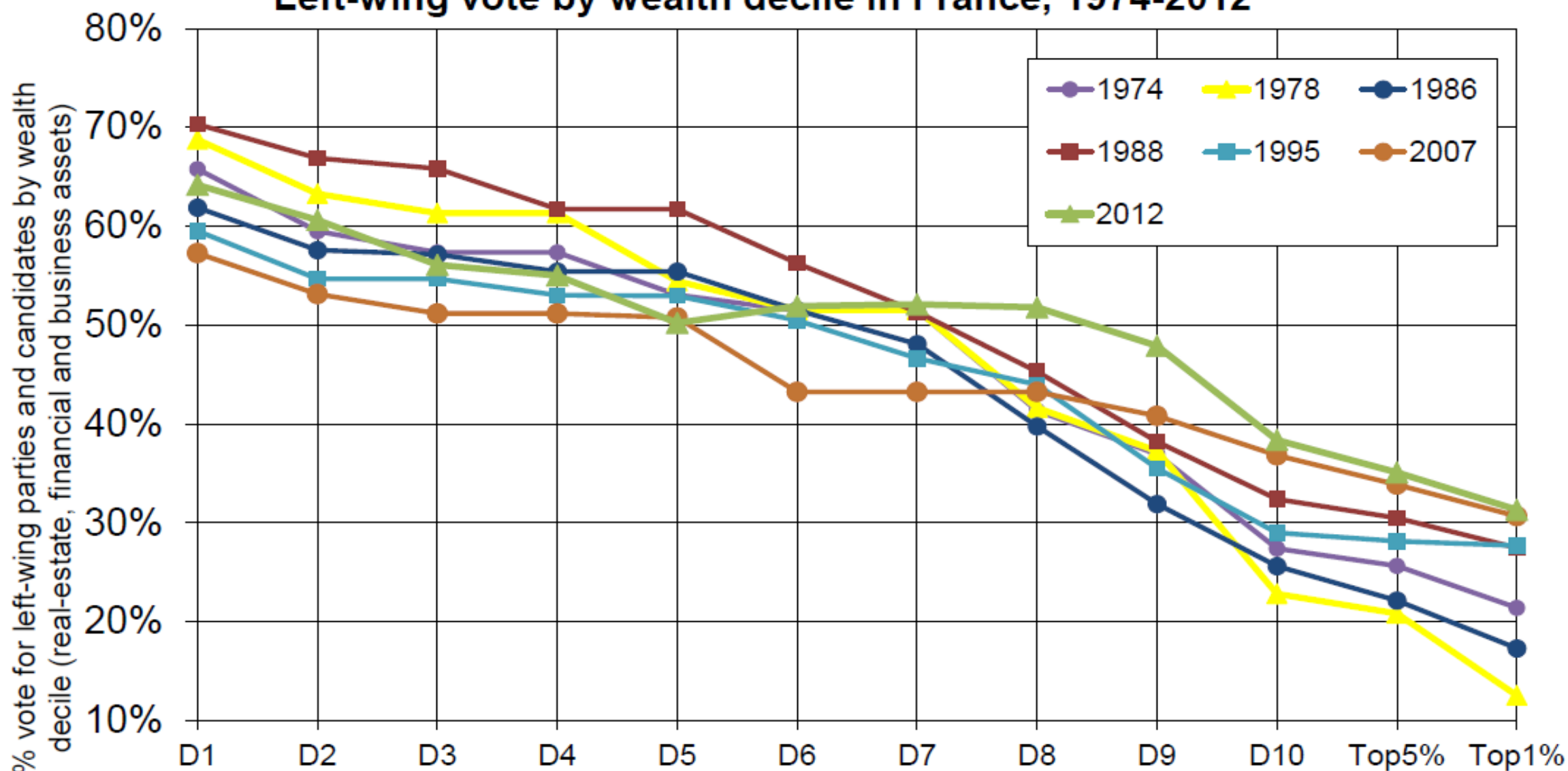
Left-wing vote by income decile in France, 1958-2012



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1978, left-wing parties (PS, PCF, Rad., etc.) obtain 46% of the vote among voters with bottom 10% income, 23% of the vote among top 10% income voters, and 17% among top 1%. Generally speaking, the profile of left-wing vote by income percentile is relatively flat within the bottom 90%, and strongly declining for the top 10%, especially at the beginning of the period.

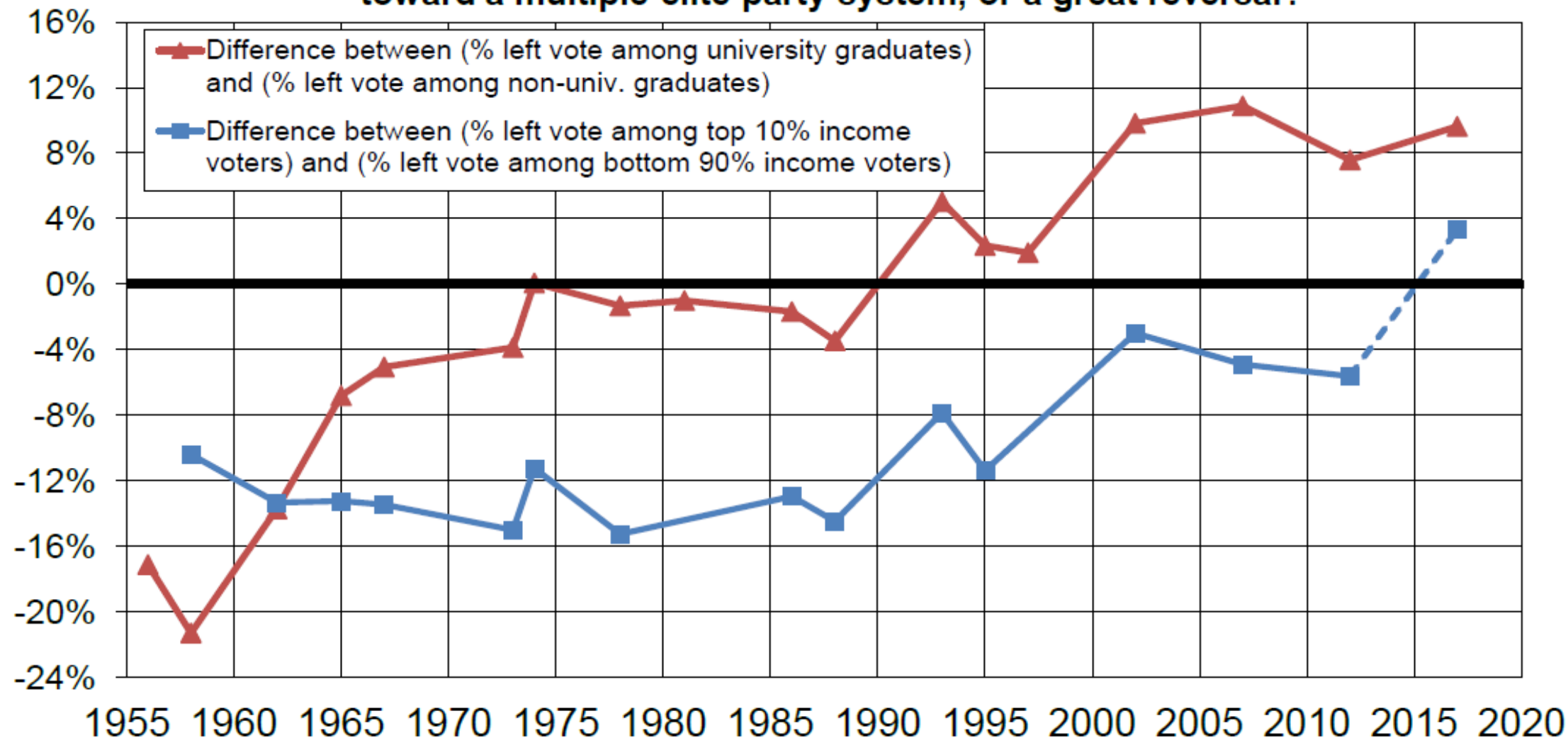
Left-wing vote by wealth decile in France, 1974-2012



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1978, left-wing parties (PS, PCF, Rad., etc.) obtain 69% of the vote among voters with bottom 10% wealth, 23% of the vote among voters with top 10% wealth, and 13% among top 1% wealth holders. Generally speaking, the profile of left-wing vote by wealth percentile is strongly declining, all along the distribution, especially at the beginning of the period.

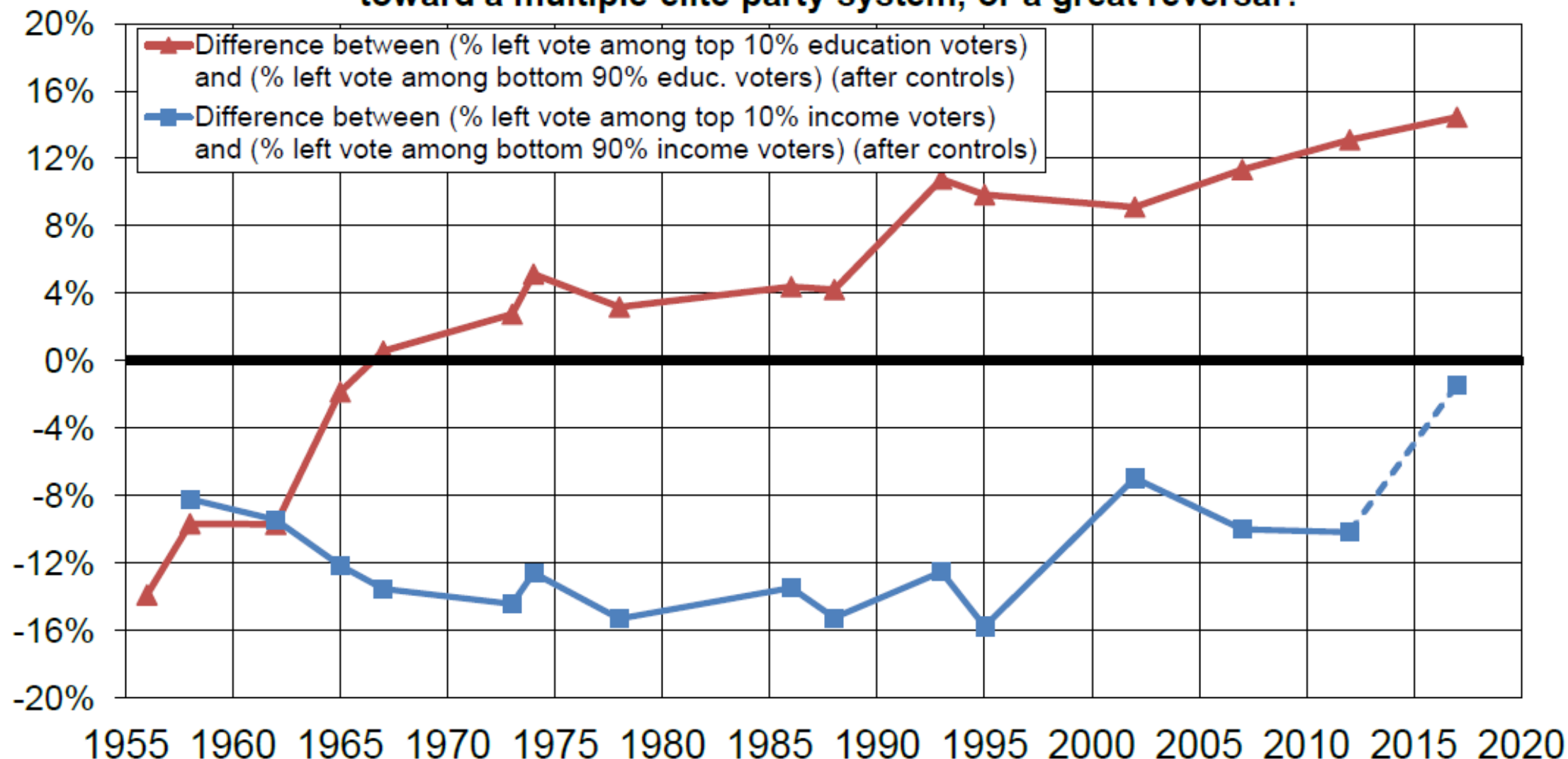
Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rise to a "multiple-elite" party system (education vs wealth); it might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.

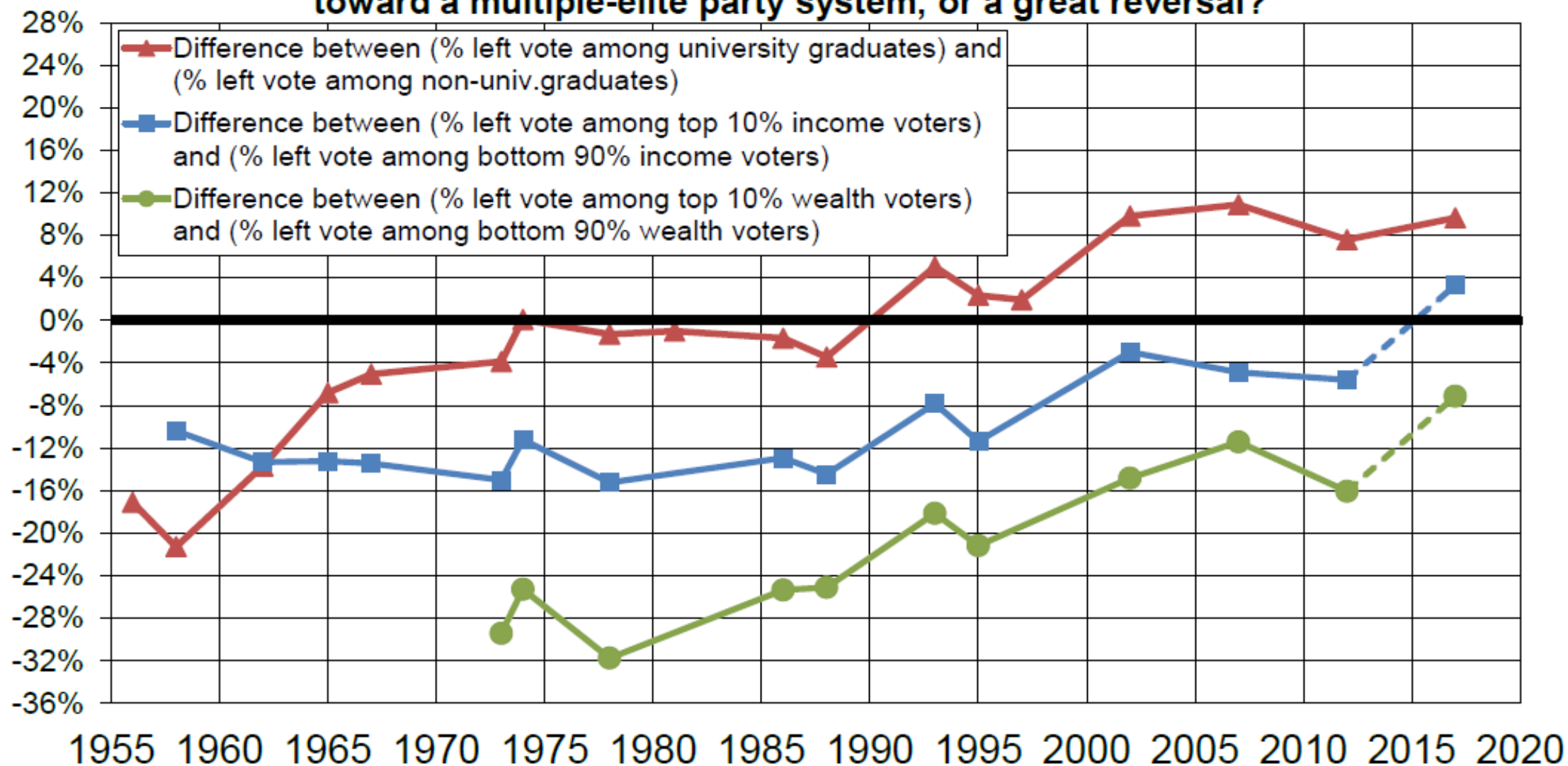
Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rise to a "multiple-elite" party system (education vs wealth); it might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.

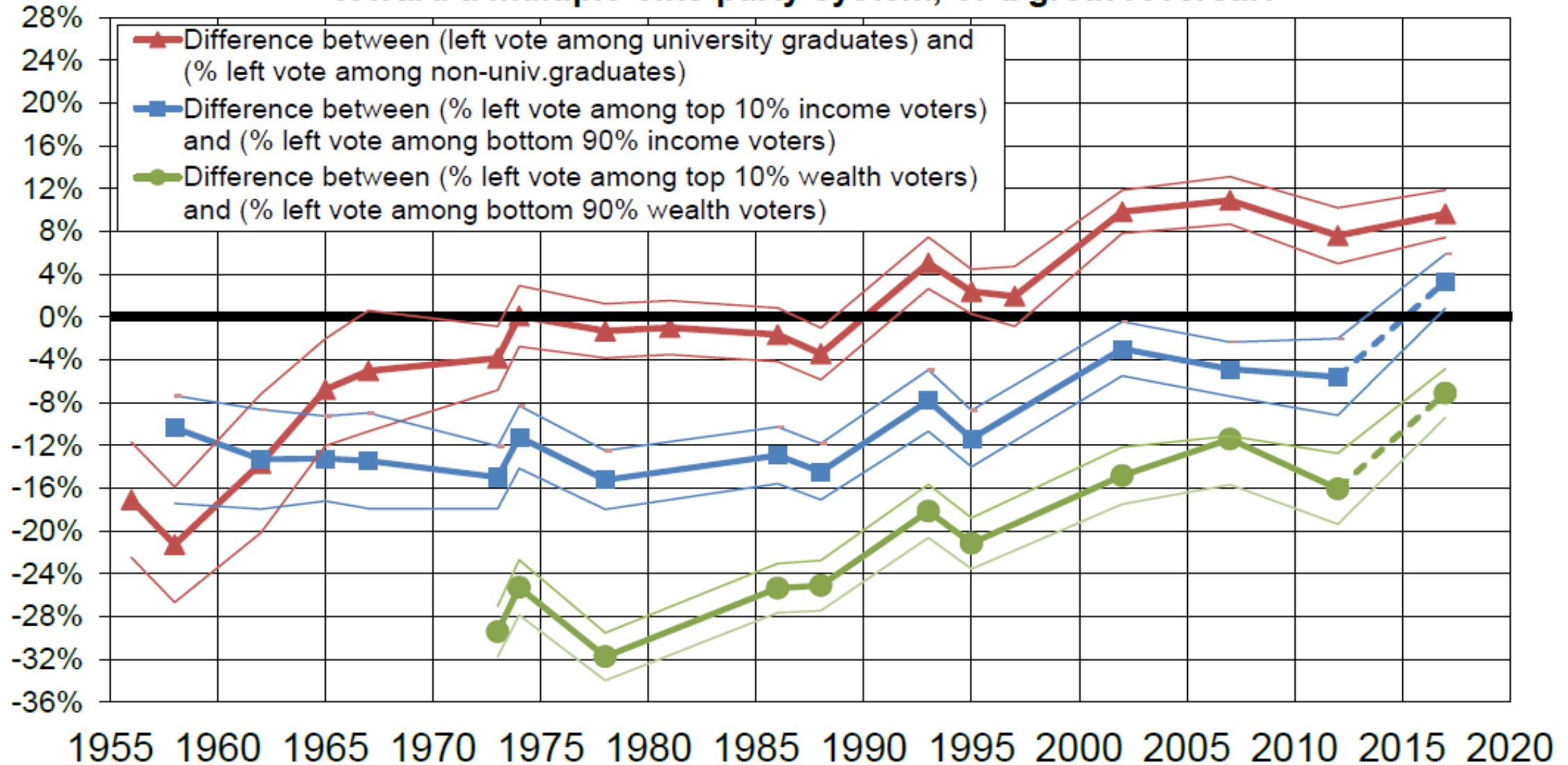
Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

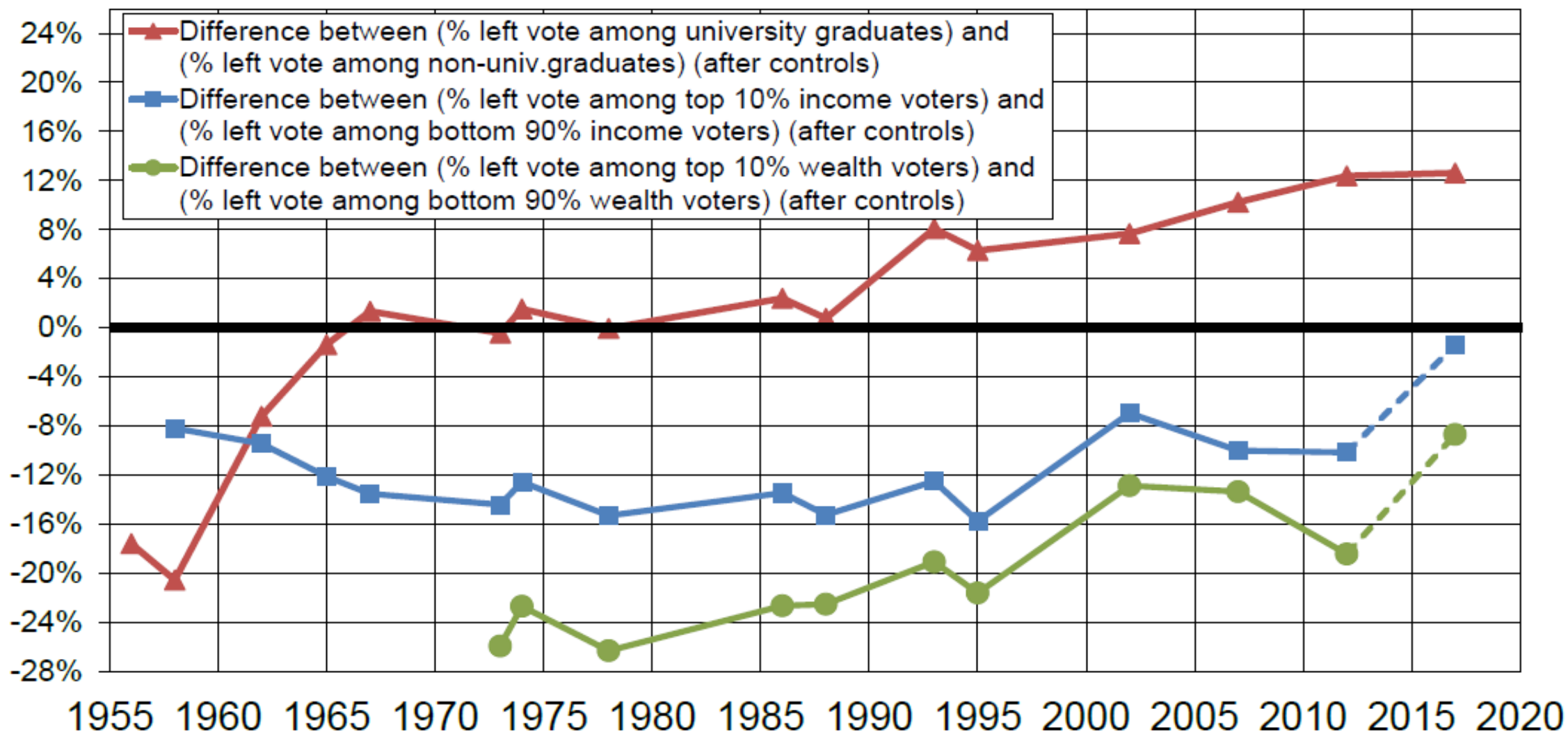
Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rising to a "multiple-elite" party system (education vs wealth); it might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.

Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)
Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rising to a "multiple-elite" party system. Fine lines indicate 90% confidence intervals.

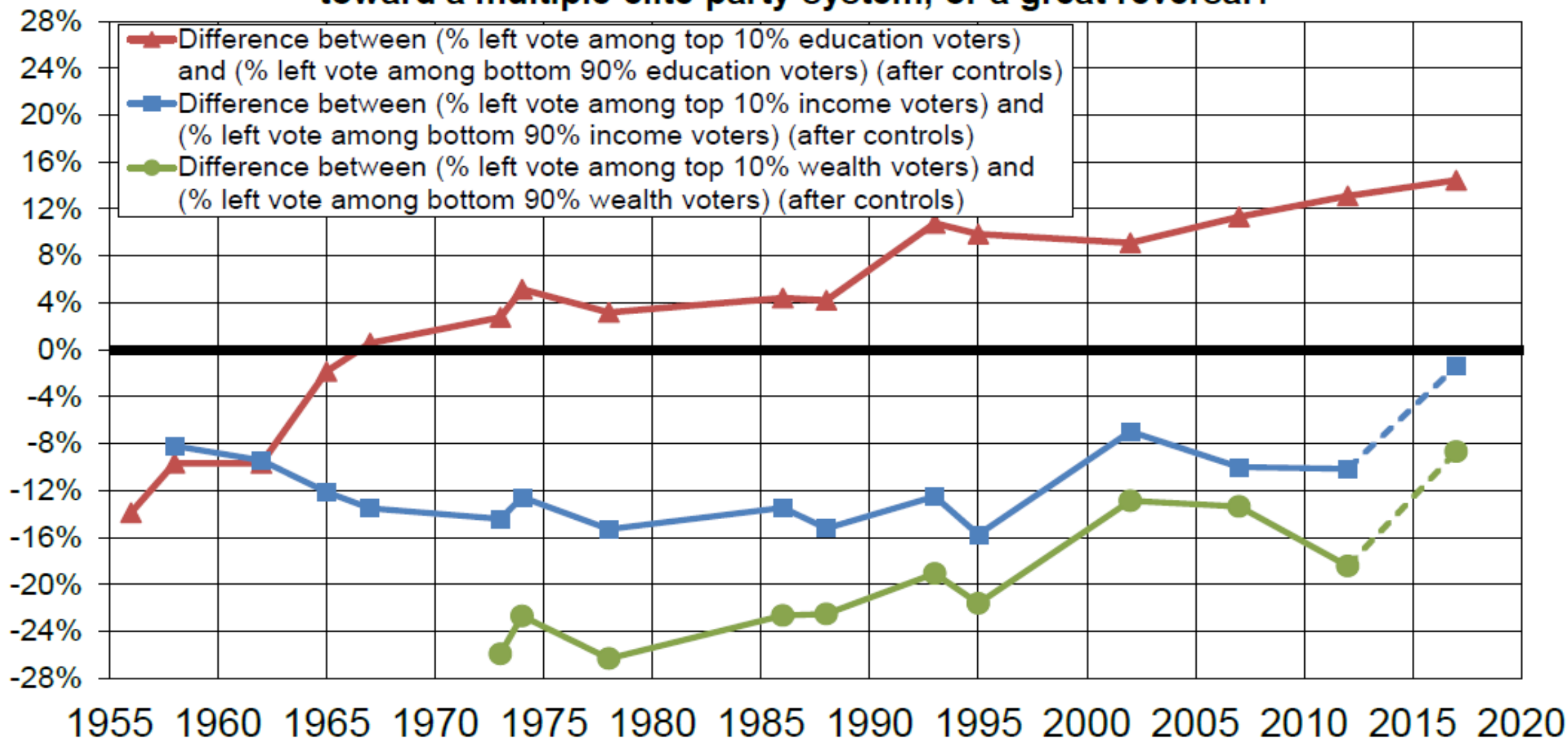
Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rise to a "multiple-elite" party system (education vs wealth); it might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.

Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?

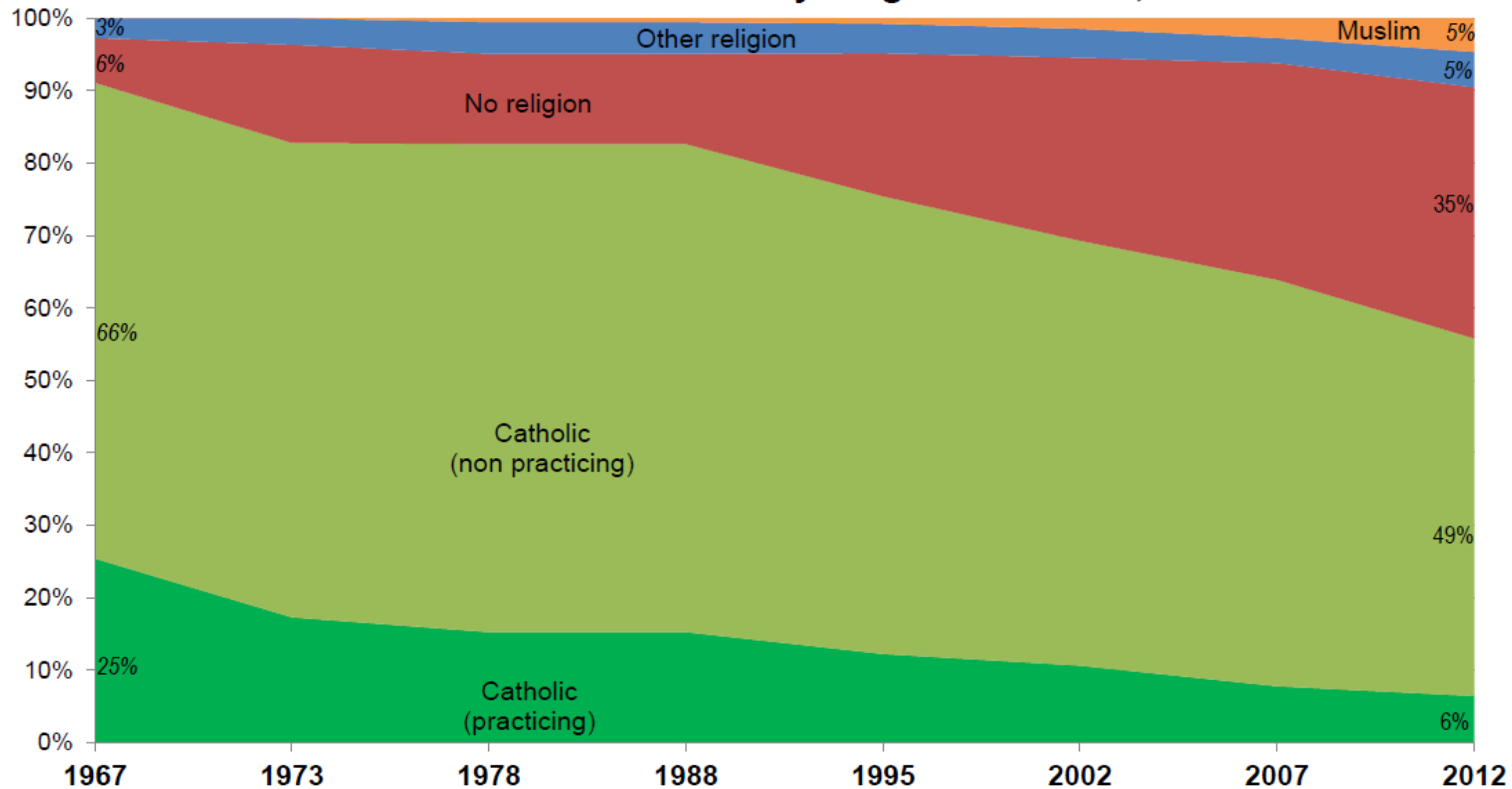


Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: the left vote used to be associated with lower education and lower income voters; it has gradually become associated with higher education voters, giving rise to a "multiple-elite" party system (education vs wealth); it might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.

- I now present results on voting patterns by **religion/foreign origins**
- **One common interpretation of the reversal of the education cleavage is the rise of globalisation/universalism/immigration: low-education felt abandoned by left-democratic parties and threatened by competition with foreign countries/workers** (and/or left parties & high-education groups felt abandoned by racism/anti-immigration of attitudes of low-education groups...)
- This will also make the transition to the US case: relatively new for Europe, not for the US

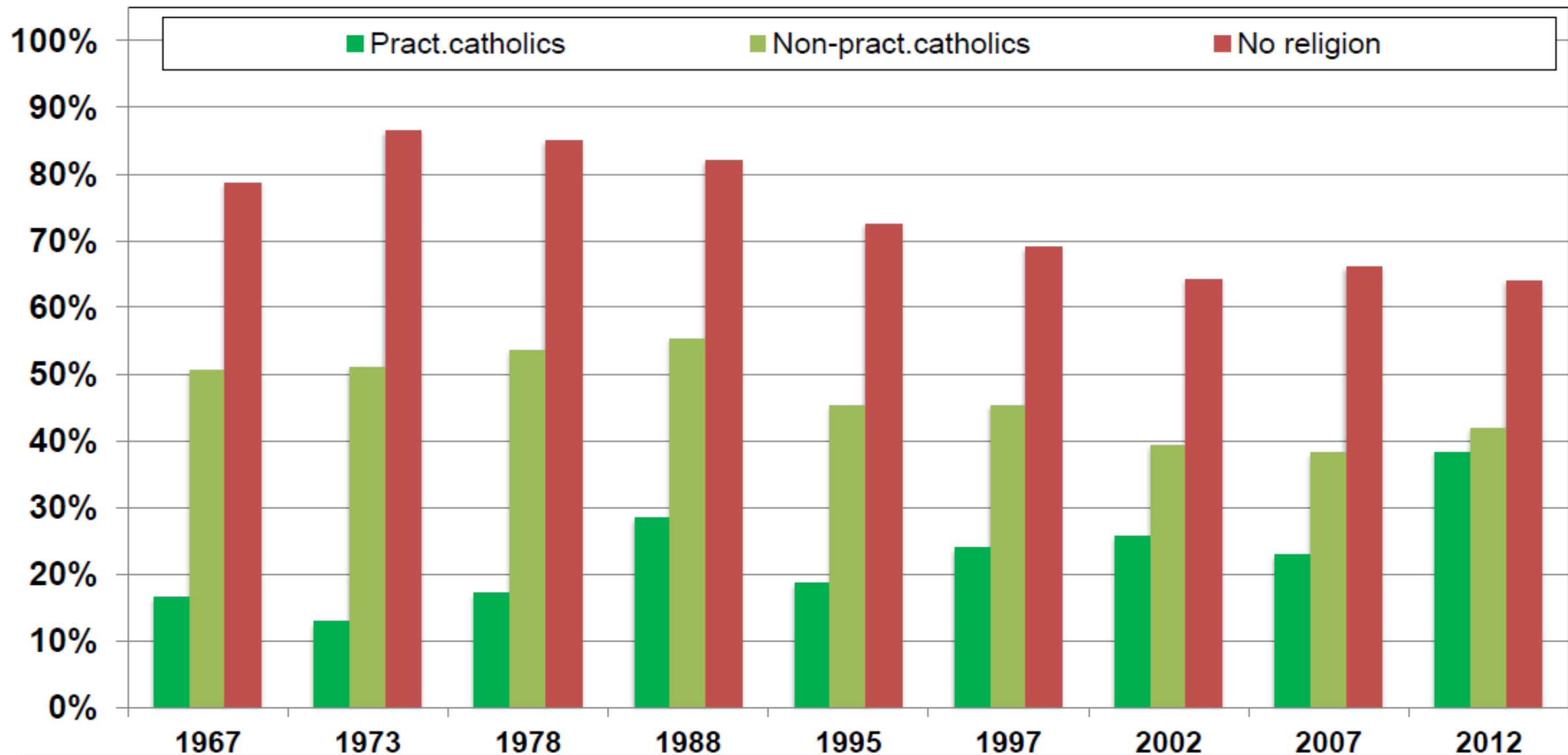
The structure of the electorate by religion in France, 1967-2012



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict).

Reading: between 1967 and 2012, the fraction of the electorate reporting to be "practicing catholic" (church at least once a month) dropped from 25% to 6%, non-practicing-catholics dropped from 66% to 49%, no-religions rose from 6% to 35%, other-religions (protestantism, judaism, buddhism, etc., except islam) rose from 3% to 5%, and the fraction reporting islam rose from 0% to 5%.

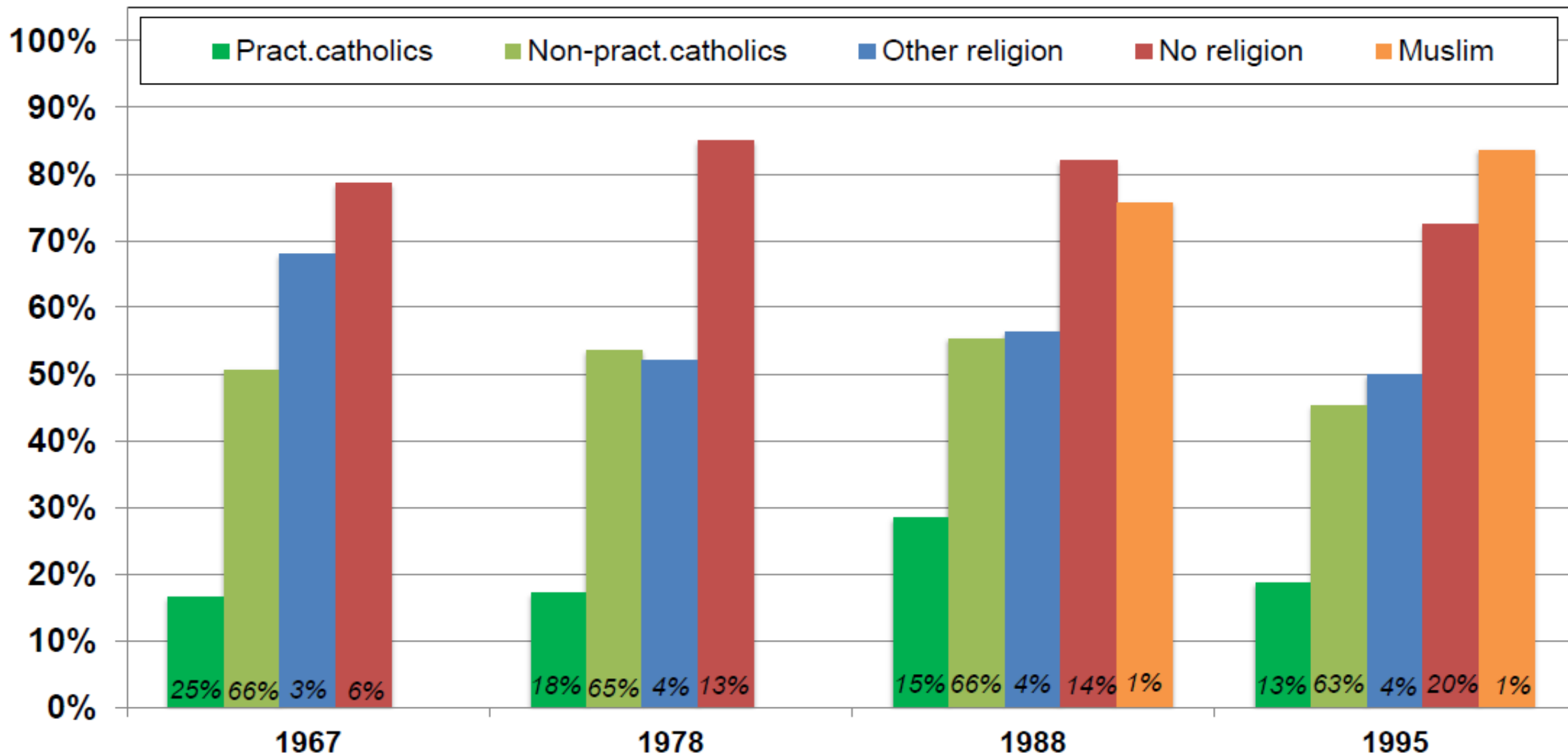
Left-wing vote by religion in France 1973-2012



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left candidate (Hollande) obtains 38% of the vote among voters reporting to be practicing catholics (going to church at least once a month), 42% among non-practicing catholics, and 64% among voters reporting no religion.

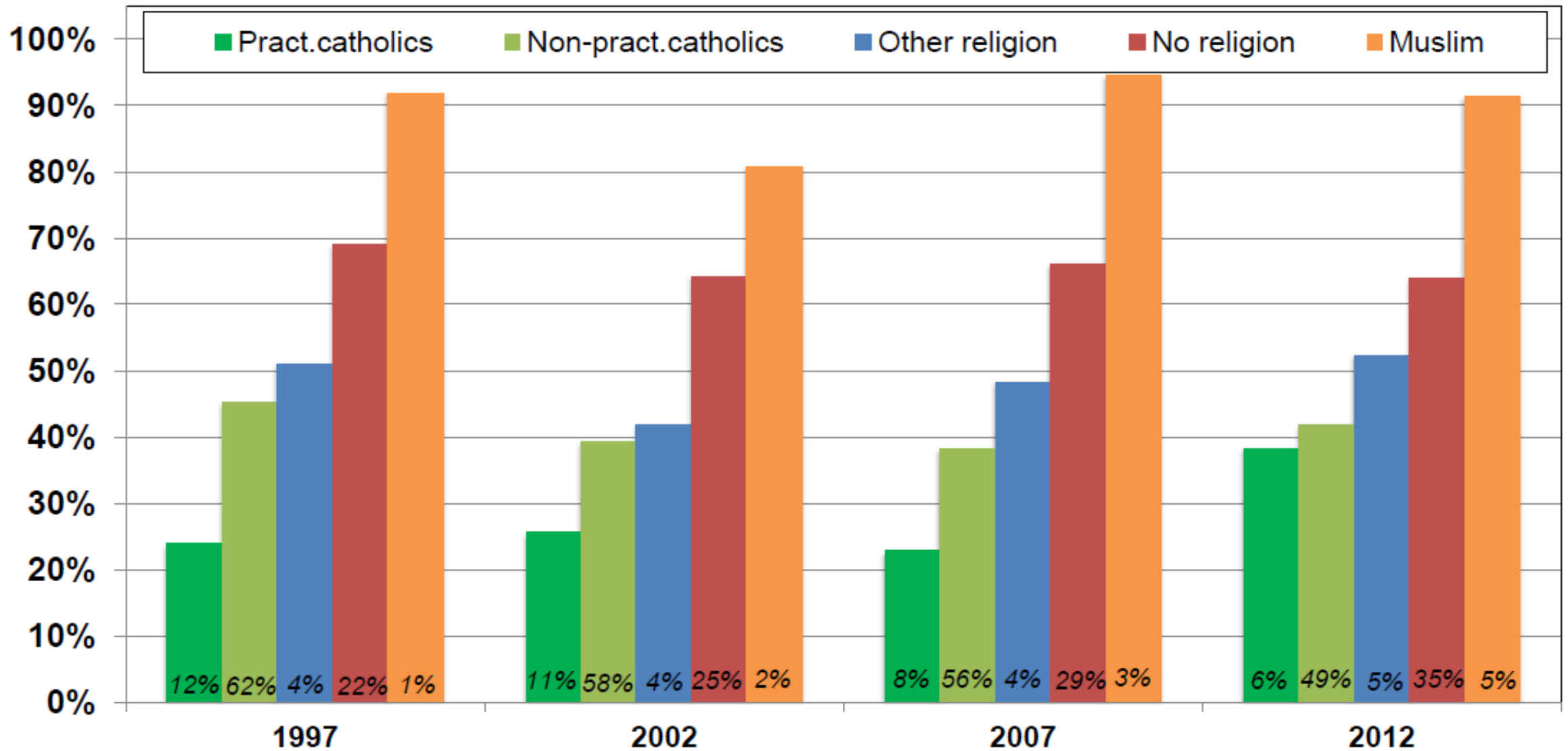
Left-wing vote by religion in France 1973-2012: the case of Islam



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1995, left-wing parties (PS, PCF, Rad., etc.) obtain 19% of the vote among practicing catholics (at least once a month), 45% among non-practicing catholics, 50% among voters reporting another religion (protestantism, judaism, buddhism, etc., except islam), 73% among voters with no religion and 84% among muslims. Islam is classified with "other religion" in 1973-1978.

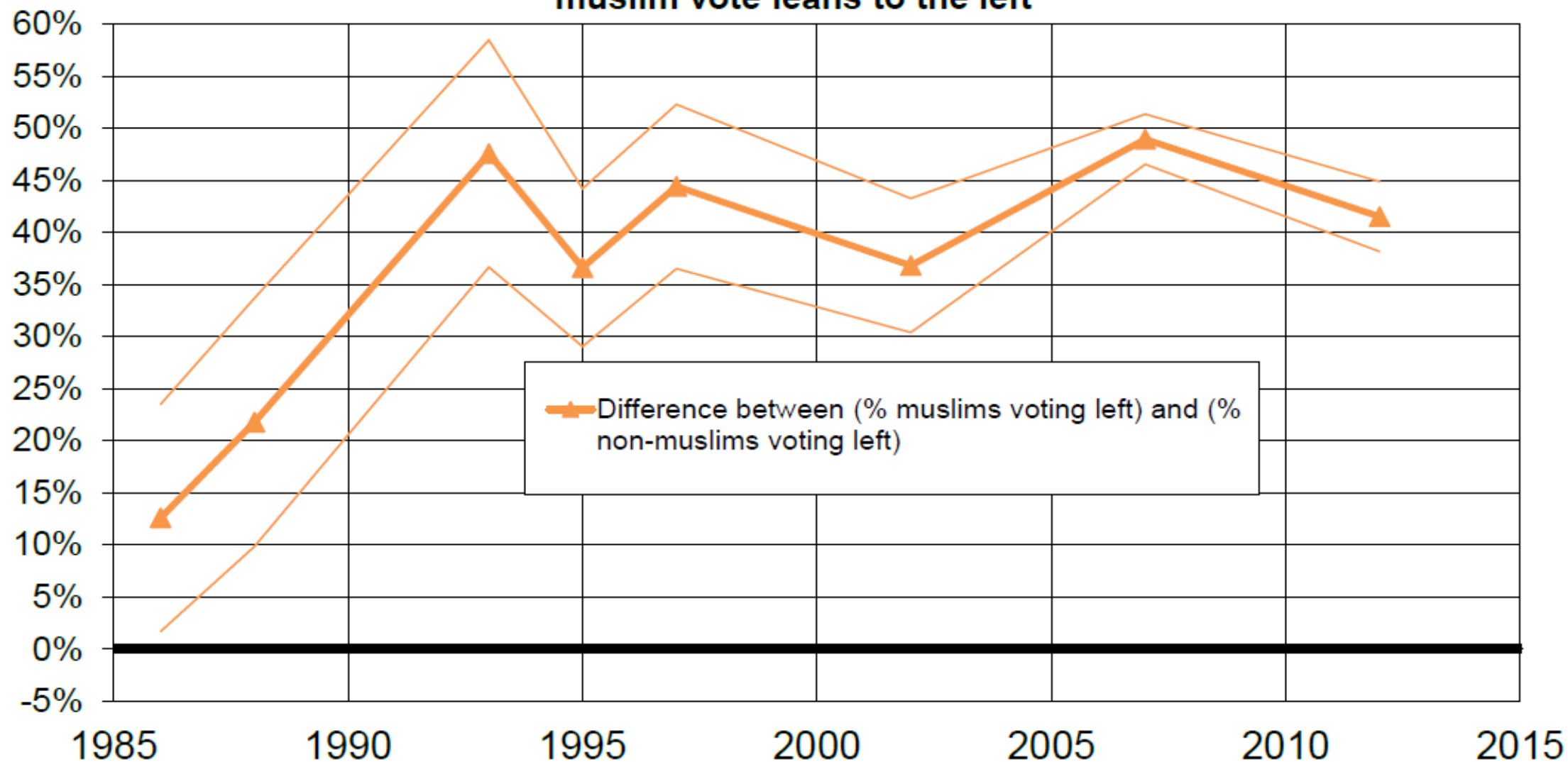
Left-wing vote by religion in France 1973-2012: the case of Islam



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

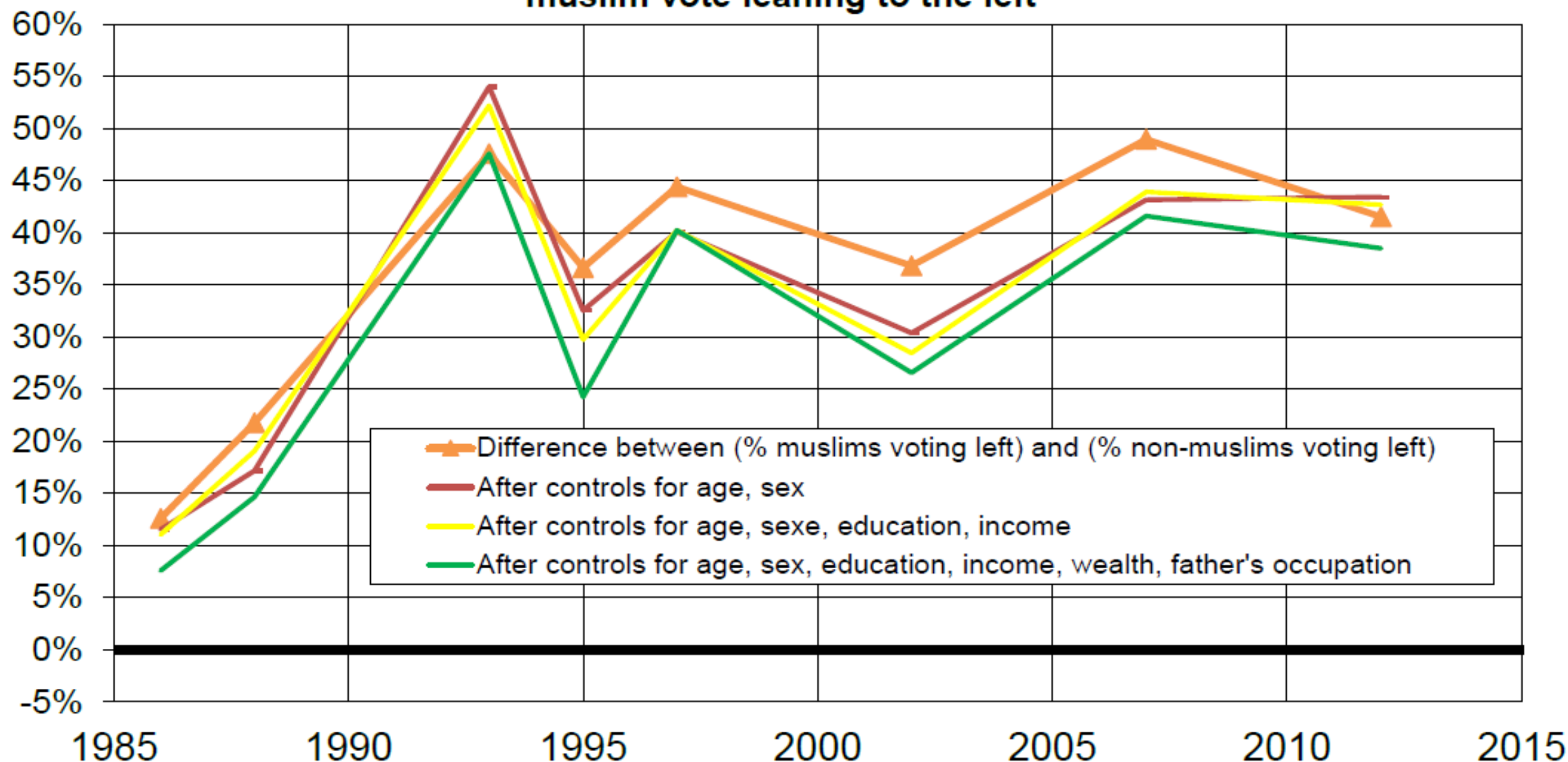
Reading: in 2012, the left-wing candidate (Hollande) obtains 38% of the vote among practicing catholics (at least once a month), 42% among non-practicing catholics, 52% among voters reporting another religion (protestantism, judaism, buddhism, etc., except islam), 64% among voters with no religion and 91% among muslims. Islam is classified with "other religion" in 1973-1978.

Political conflict in France, 1986-2012: muslim vote leans to the left



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 2012, the left candidate (Hollande) obtained a score among muslim voters that was 42 points higher than among other voters; fine lines indicate 90% confidence intervals.

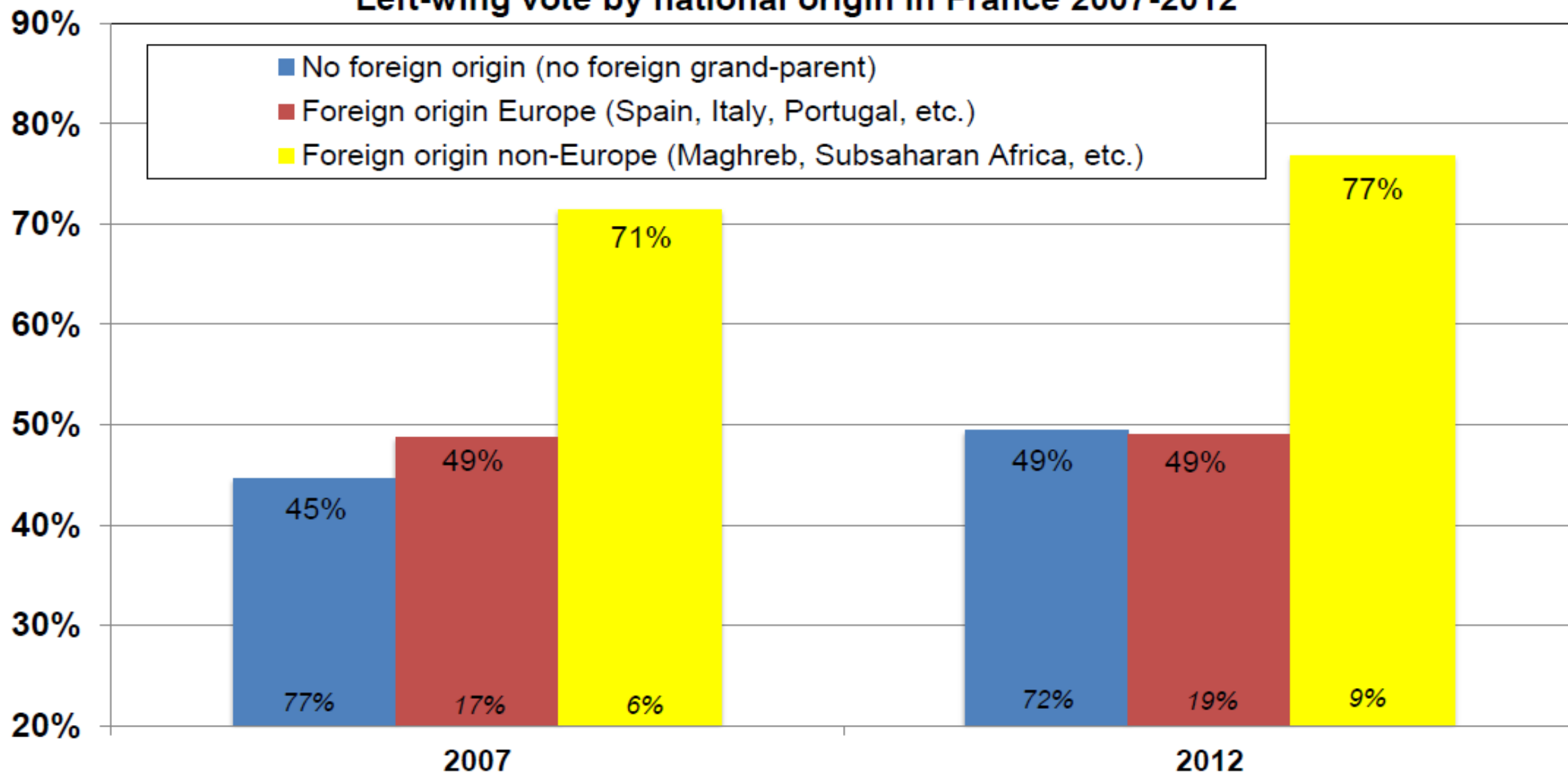
Political conflict in France, 1986-2012: muslim vote leaning to the left



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left candidate (Hollande) obtained a score among muslim voters that was 42 points higher than among other voters; the gap falls to 38 points after controls for age, sex, educ., income, wealth, father's occupation.

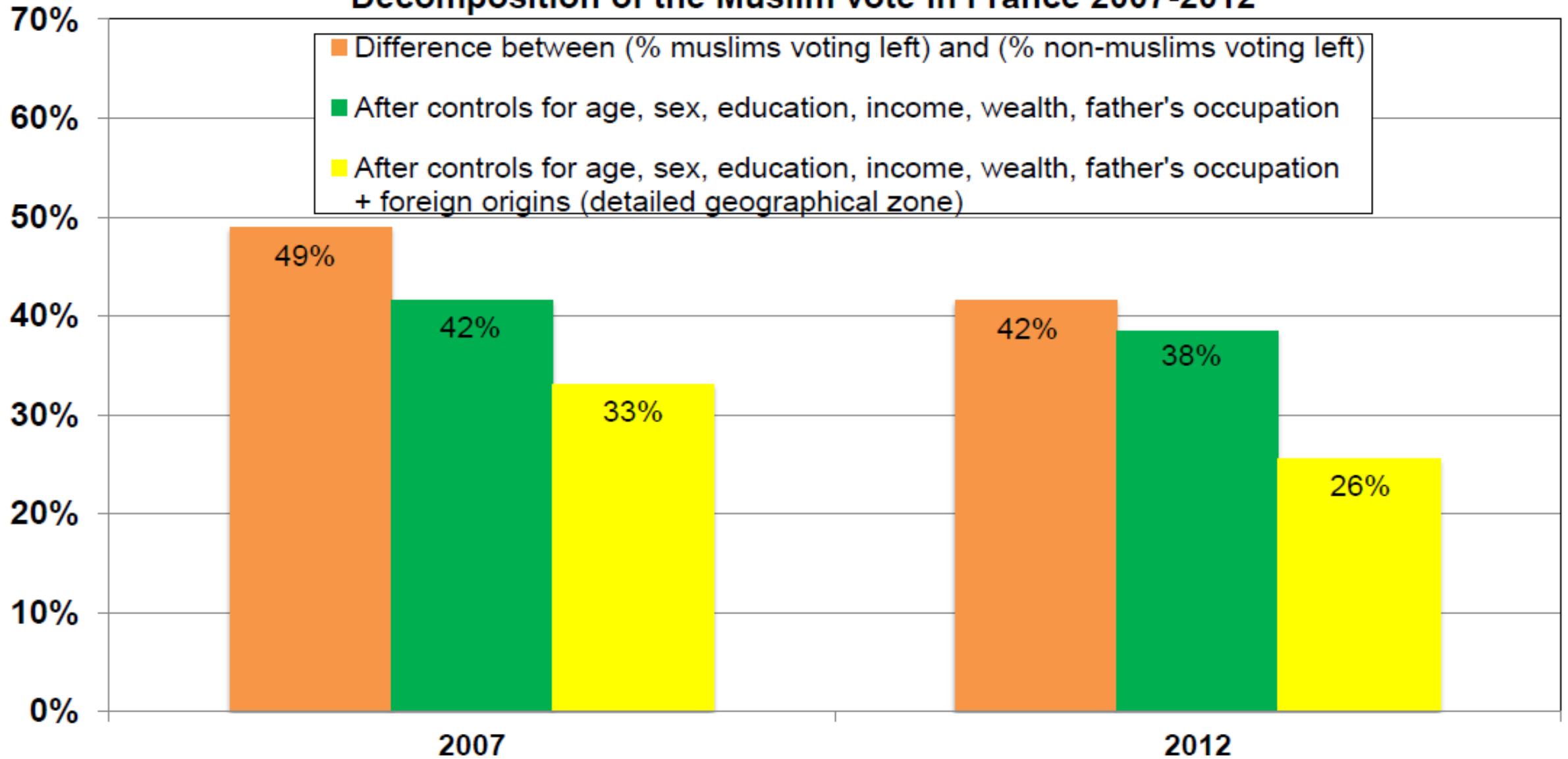
Left-wing vote by national origin in France 2007-2012



Source: author's computation using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left-wing candidate (Hollande) obtained 49% of the vote among voters with no foreign origin (no foreign grand-parent), 49% of the vote among voters with European foreign origins (in practice mostly Spain, Italy, Portugal, etc.), and 77% of the vote among voters with extra-European foreign origins (in practice mostly Maghreb and sub-Saharan Africa).

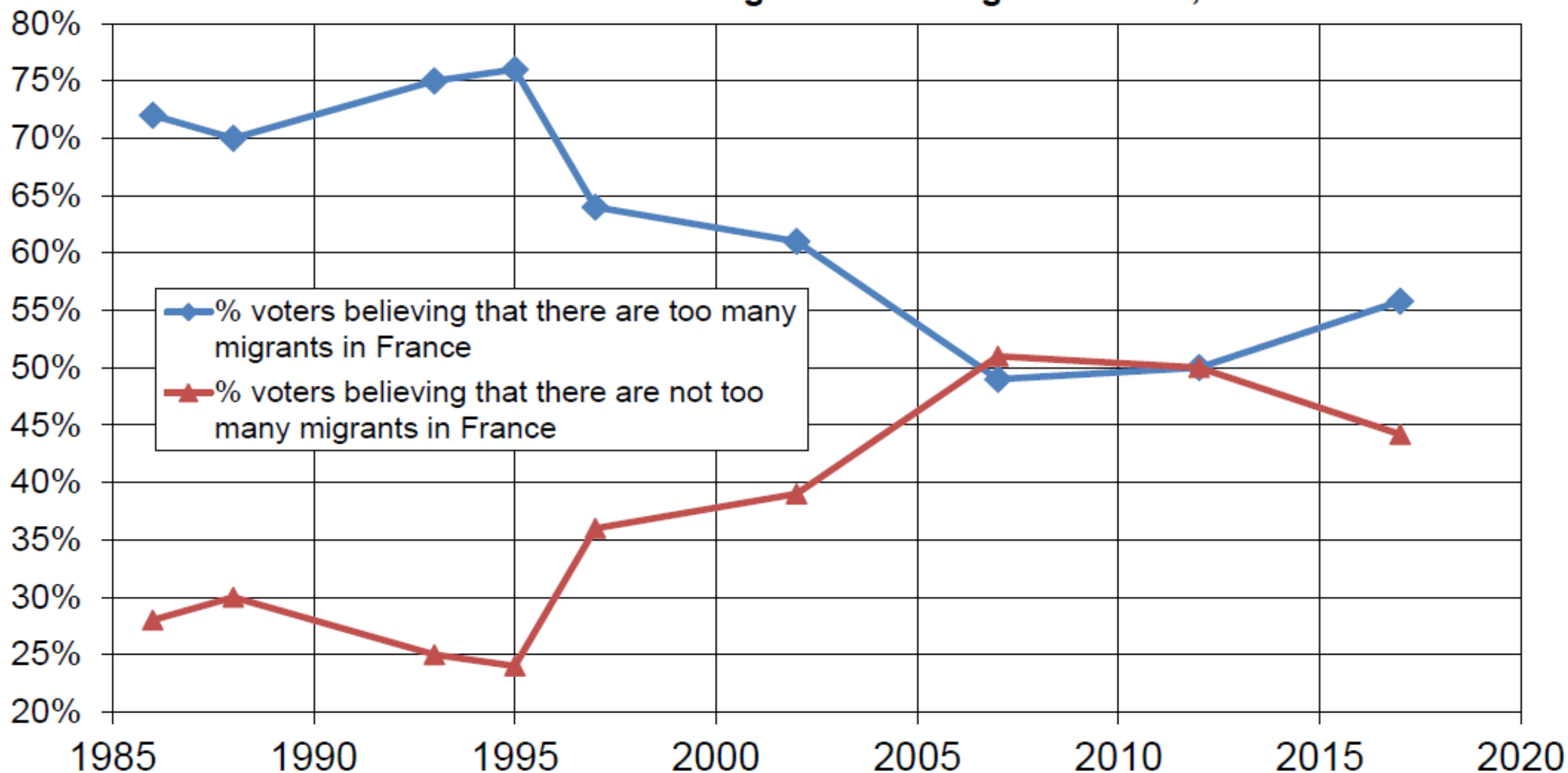
Decomposition of the Muslim vote in France 2007-2012



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the left candidate (Hollande) obtained a score among muslim voters that was 42 points higher than among other voters; the gap falls to 38 points after controls for age, sex, educ., income, wealth, father's occup., and 26 pts if we add controls for foreign origins (broken down by area: Italy, Spain, Portugal, other Europe, North Africa, Subsaharan Africa, Asia, other non Europe).

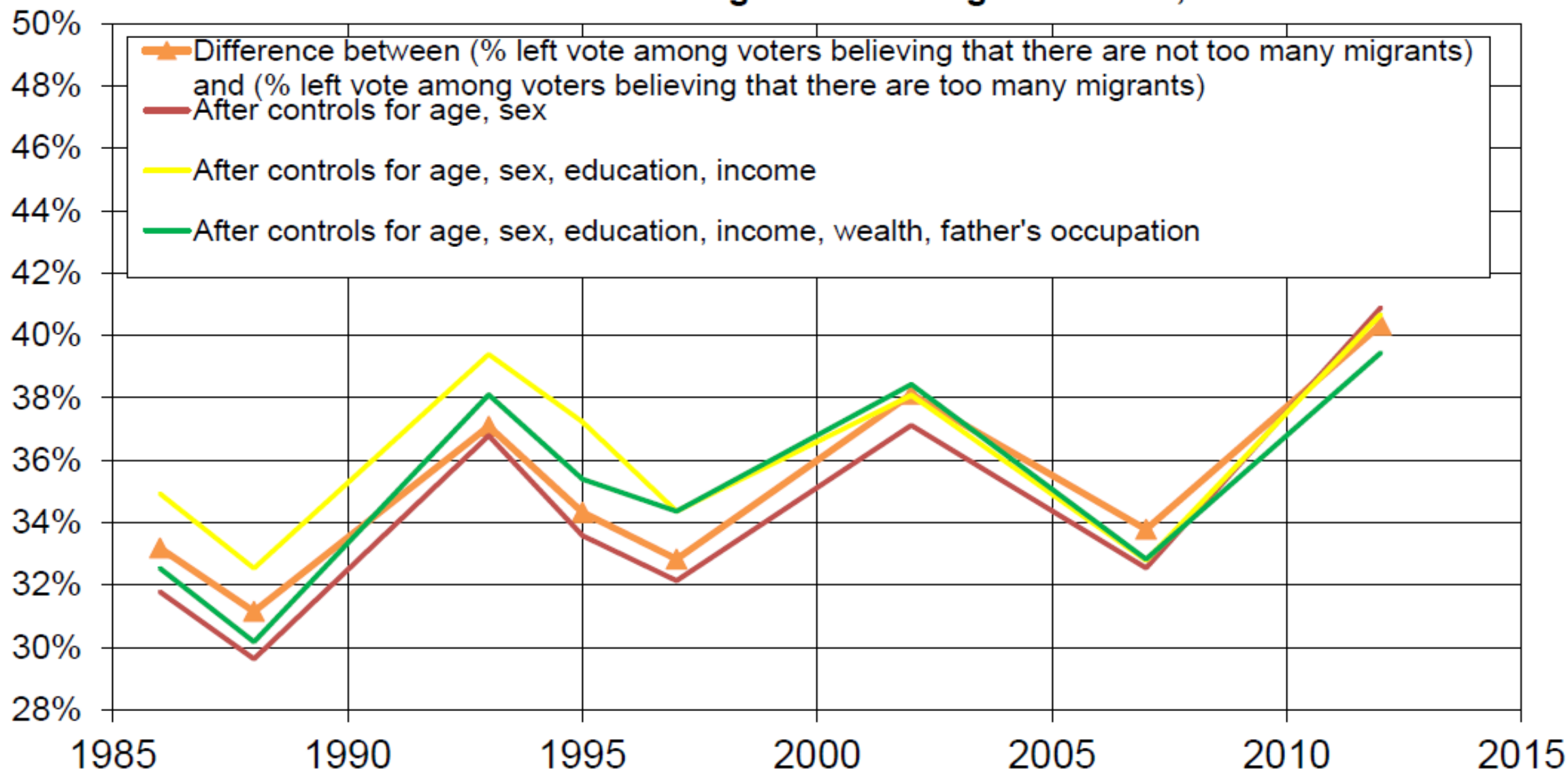
Political conflict and the migration cleavage in France, 1986-2017



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Lecture: in 1986, 72% of voters consider that there are too many migrants in France (vs 28% believing the opposite); in 2017 this fraction is equam to 56% (vs 44% believing the opposite).

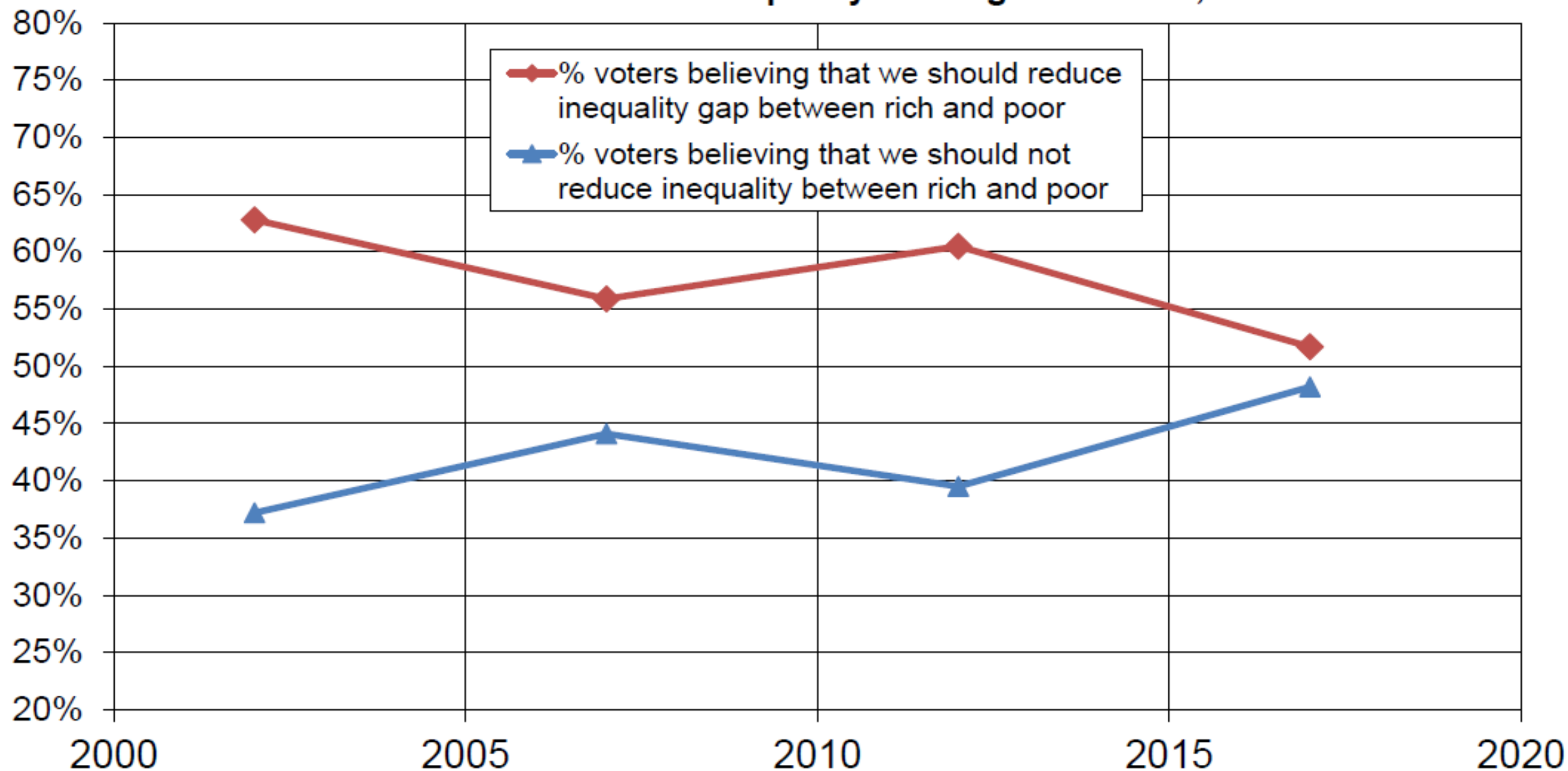
Political conflict and the migration cleavage in France, 1986-2017



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1988, left vote is 31 points higher among voters believing that there are not too many migrants than among those believing there are too many migrants; in 2012, this gap is equal to 40 points.

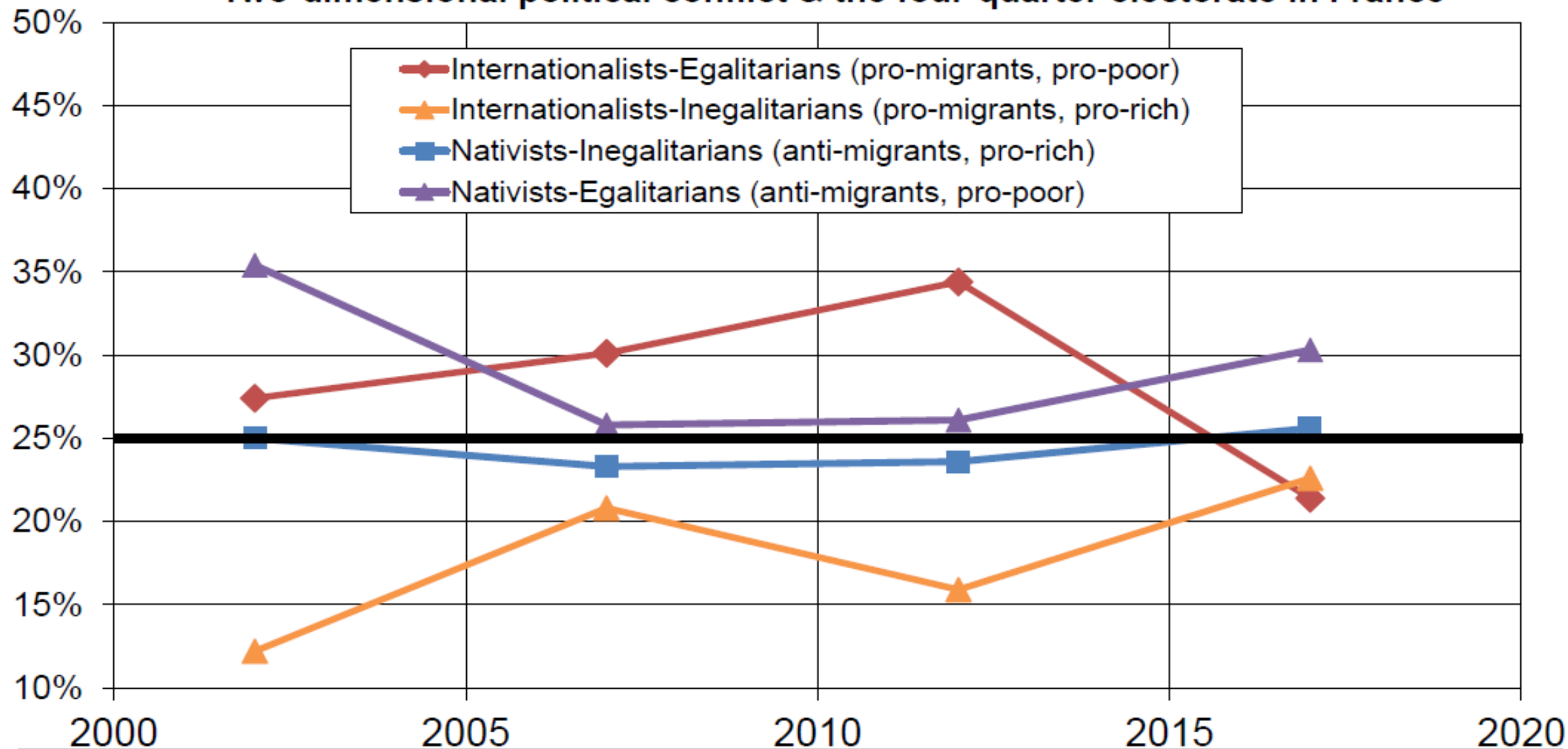
Political conflict and the inequality cleavage in France, 2002-2017



Source: author's computations using French post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Lecture: in 2002, 63% of voters consider that we should reduce inequality gap between rich and poor in France (vs 37% believing the opposite); in 2017 this fraction is equal to 52% (vs 48% believing the opposite).

Two-dimensional political conflict & the four-quarter electorate in France



Source: author's computations using French post-electoral surveys 2002-2017 (see piketty.pse.ens.fr/conflict)

Lecture: in 2017, 21% of voters are "internationalists-egalitarians" (they consider that there are not too many migrants, and that we should reduce inequality between rich and poor); 26% are "nativists-inegalitarians" (they consider that there are too many migrants and that we should not reduce rich-poor gap); 23% are "internationalists-inegalitarians" & 30% "nativists-egalitarians".

Two-dimensional political conflict in France 2017: an electorate divided into four quarters

Presidential election 2017 (1 st round)	All voters	Mélenchon /Hamon ("left")	Macron ("center")	Fillon ("right")	Le Pen /Dupont-Aignan ("extreme right")
	100%	28%	24%	22%	26%
"There are too many immigrants in France" (% agree)	56%	32%	39%	62%	91%
"In order to achieve social justice we need to take from the rich and give to the poor" (% agree)	51%	67%	46%	27%	61%
University graduates (%)	33%	39%	41%	36%	16%
Income > 4000€/m (%)	15%	9%	20%	26%	8%

Internationalist-Egalitarian (pro-migrant, pro-poor)	21%	58%	28%	9%	5%
Internationalist-Inegalitarian (pro-migrant, pro-rich)	23%	26%	38%	30%	6%
Nativist-Inegalitarian (anti-migrant, pro-rich)	26%	12%	16%	37%	35%
Nativist-Egalitarian (anti-migrant, pro-poor)	30%	19%	16%	14%	51%

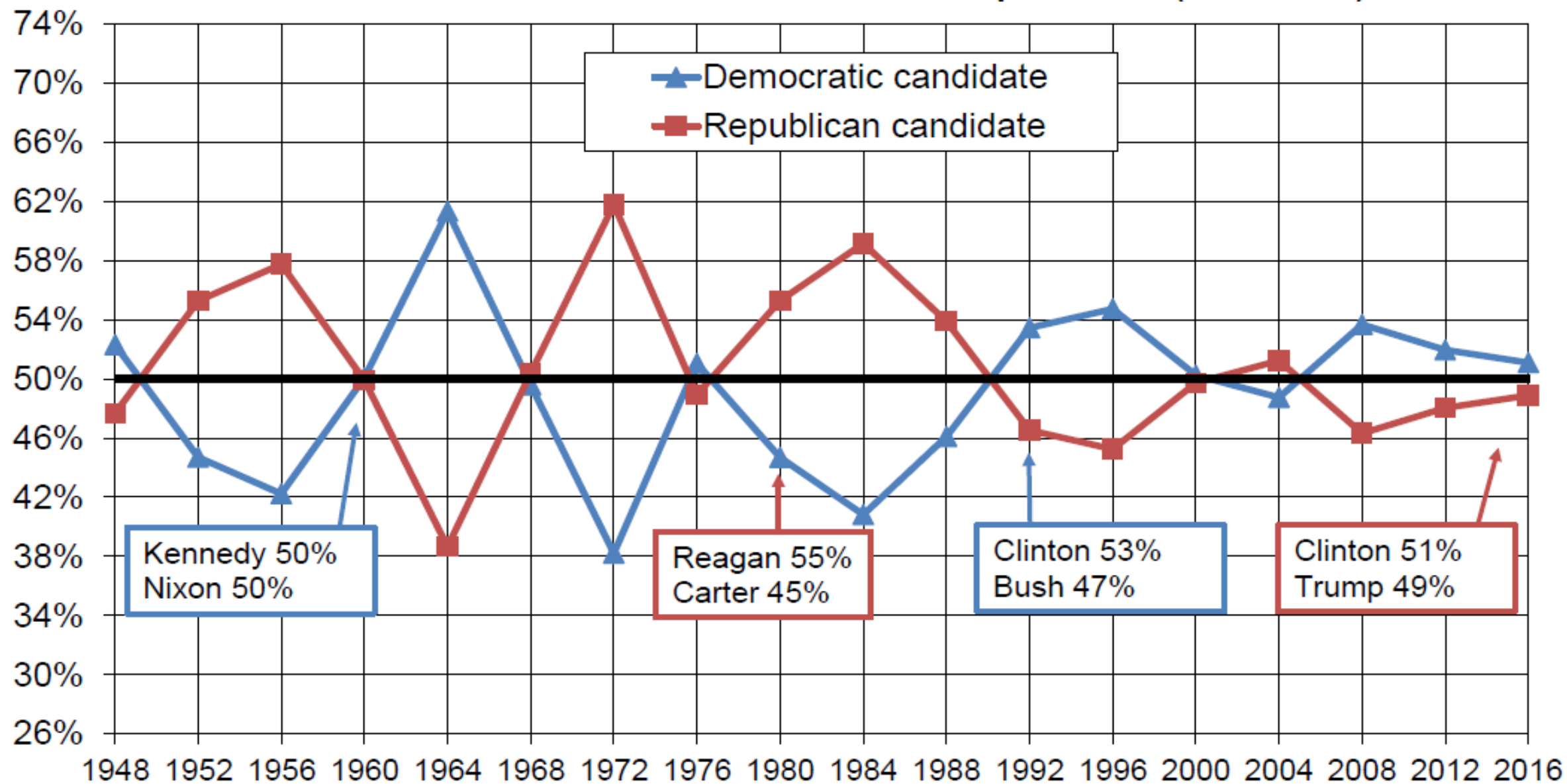
Source: author's computations using French post-electoral survey 2017 (see piketty.pse.ens.fr/conflict). **Reading:** in 2017, 28% of first-round voters voted for Mélenchon/Hamon, and 32% of them believe that there are too many migrants in France (vs 56% among all voters); 21% of first-round voters are "internationalist-egalitarian" (they believe that there are not too many migrants and that we should redistribute from rich to poor), and 58% of them voted for "left" candidates.

Note: the votes for Arthaud/Poutou (2%) and Asselineau/Cheminade/Lassale (2%) were added to the votes for Melenchon-Hamon and Fillon (respectively).

2. Evidence from US

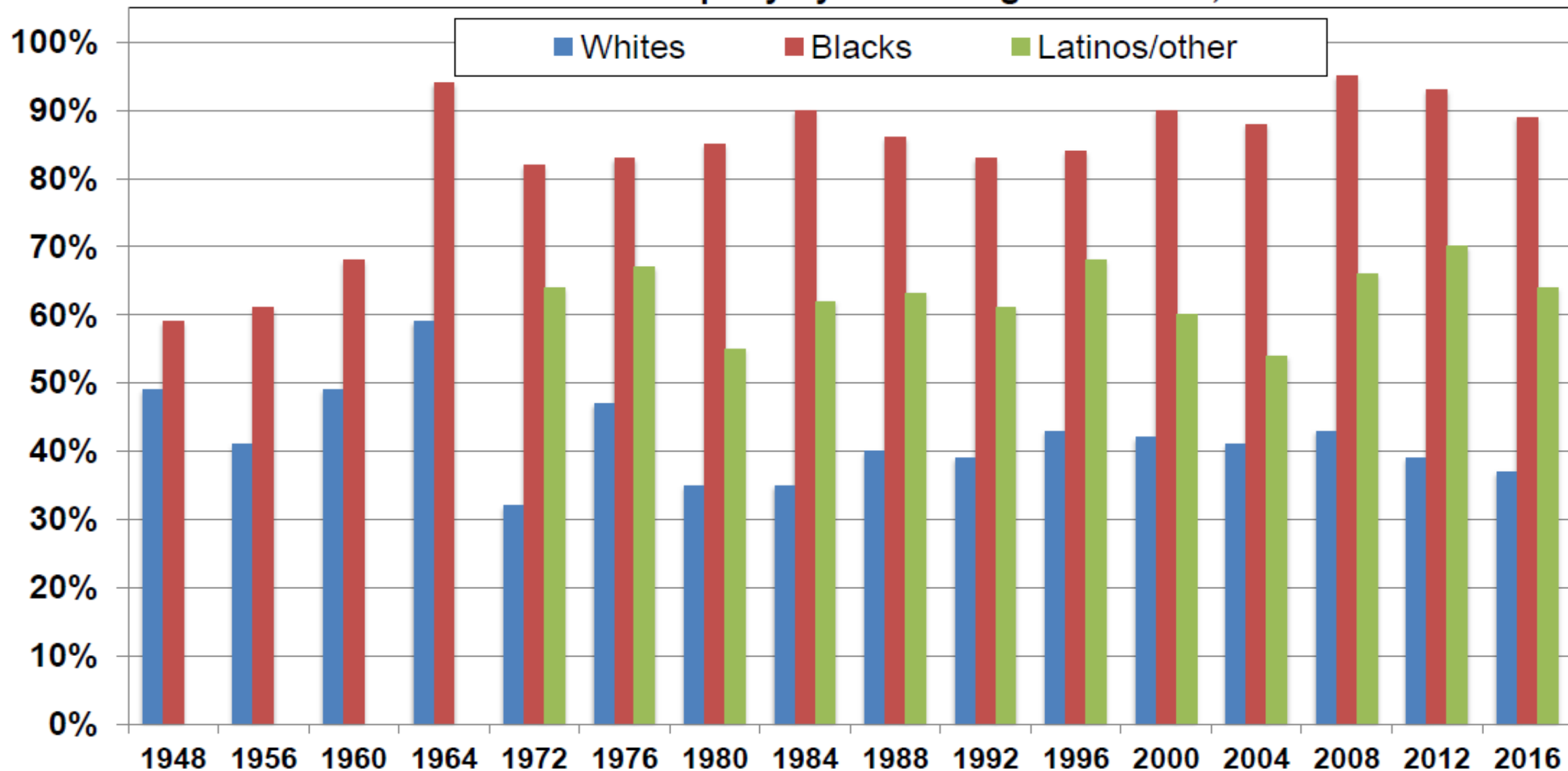
- Long tradition of post-electoral surveys: 1948-2016 biannual survey ANES series; homogenous micro-files; limited sample size (4000 obs/survey in recent years, but 1000-2000/survey for most of the series)
- 1972-2016 post-electoral surveys organized by media consortium (distributed by Roper): much bigger sample size (20-50000 obs/survey), but much smaller number of questions and income brackets
- Unfortunately US surveys usually do not ask questions on wealth
- I start by presenting results on changing voting patterns by **race**, then move to **education**, then **income**, so as to compare multiple-elite result with France

Political conflict in the US: democrats vs republicans (1948-2016)



Percentage of popular vote obtained by democratic and republican candidates in US presidential elections 1948-2016 (excluding other candidates). Source: see piketty.pse.ens.fr/conflict.

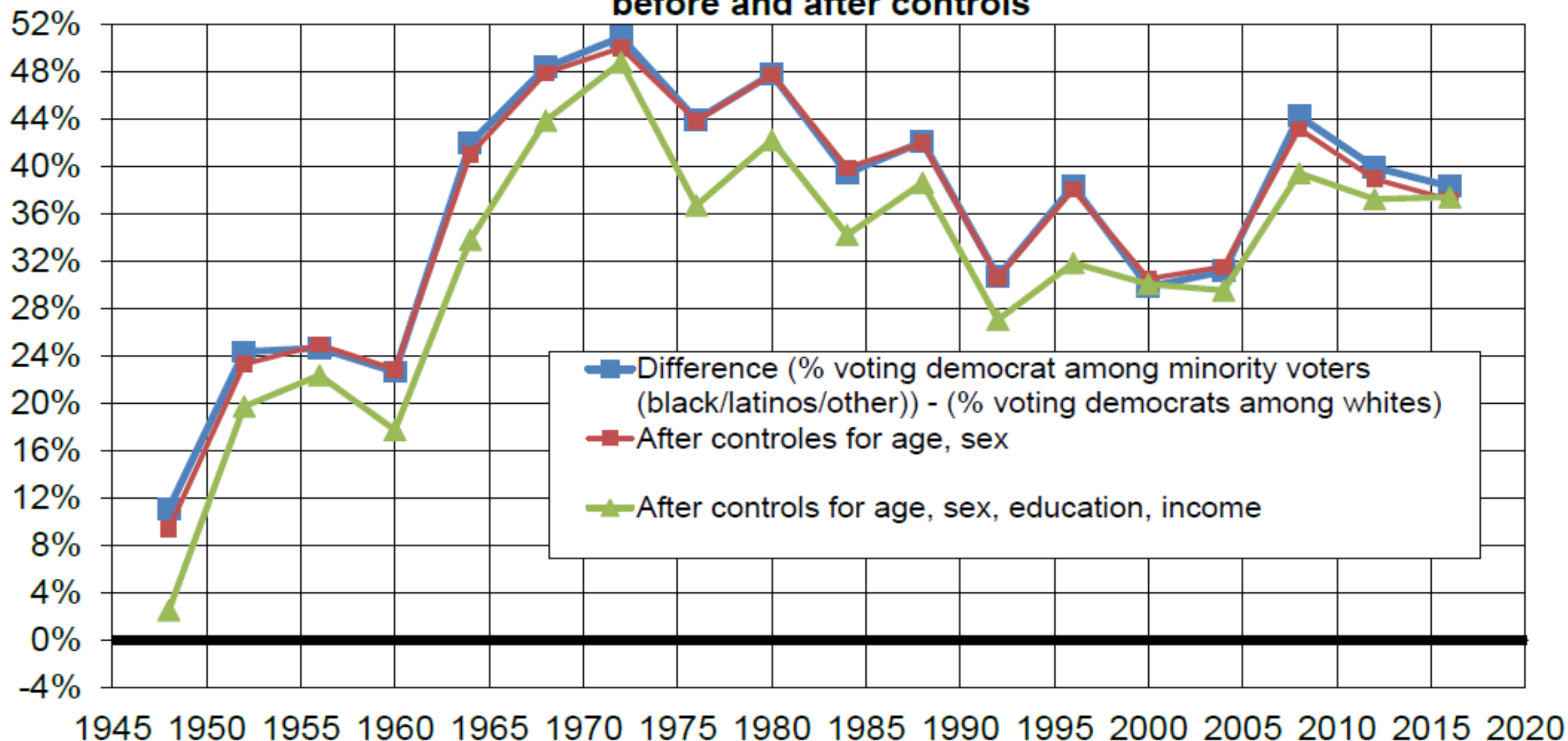
Vote for democratic party by ethnic origin in the US, 1948-2016



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

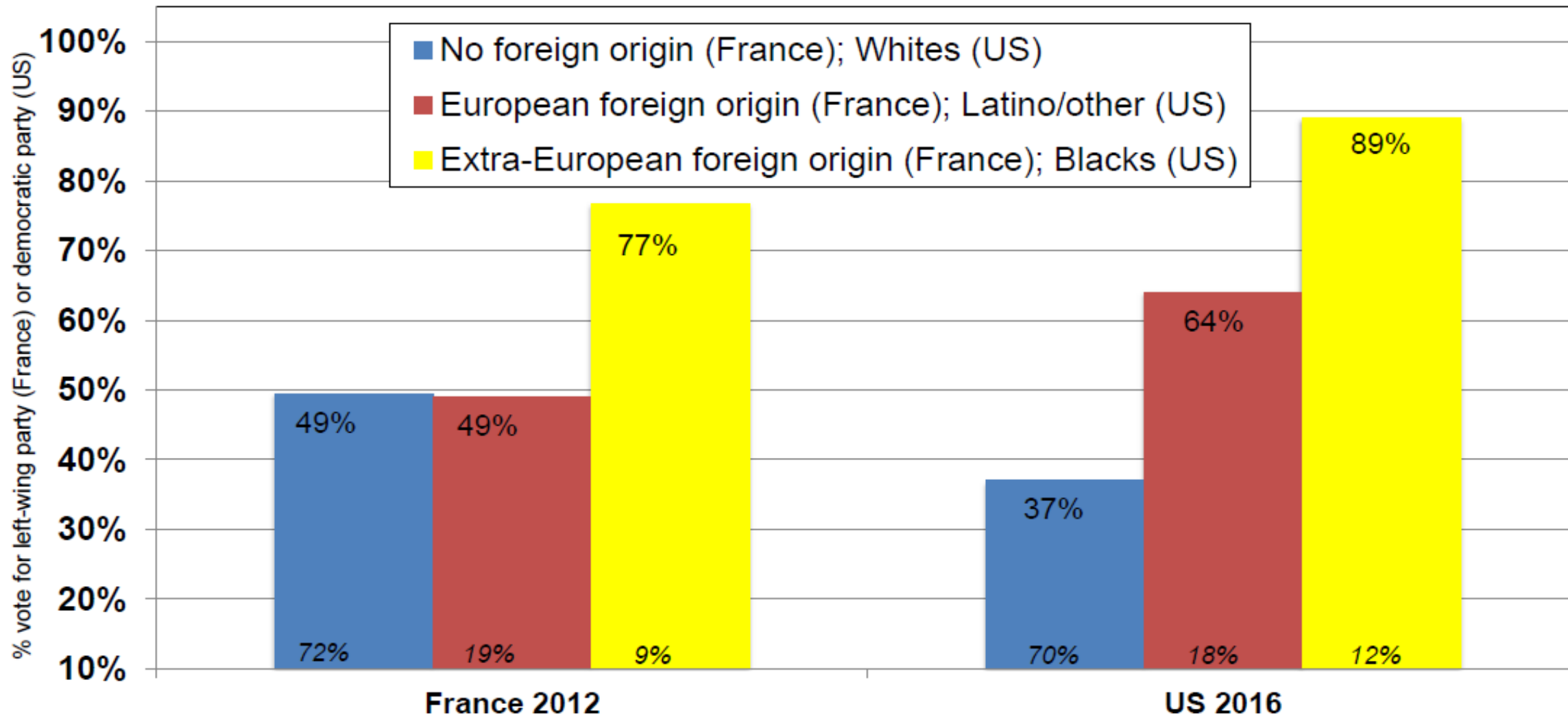
Reading: in 2016, the democratic party candidate (Clinton) obtains 37% of the vote among white voters, 89% of the vote among black voters and 64% of the vote among latino and other voters.

Minority vote in the US, 1948-2017: before and after controls



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)
Reading: in 1948, the democratic candidate obtained a score that was 11 points higher among minority voters than among whites; in 2016, the democratic candidate obtained a score that was 39 points higher among minority voters.

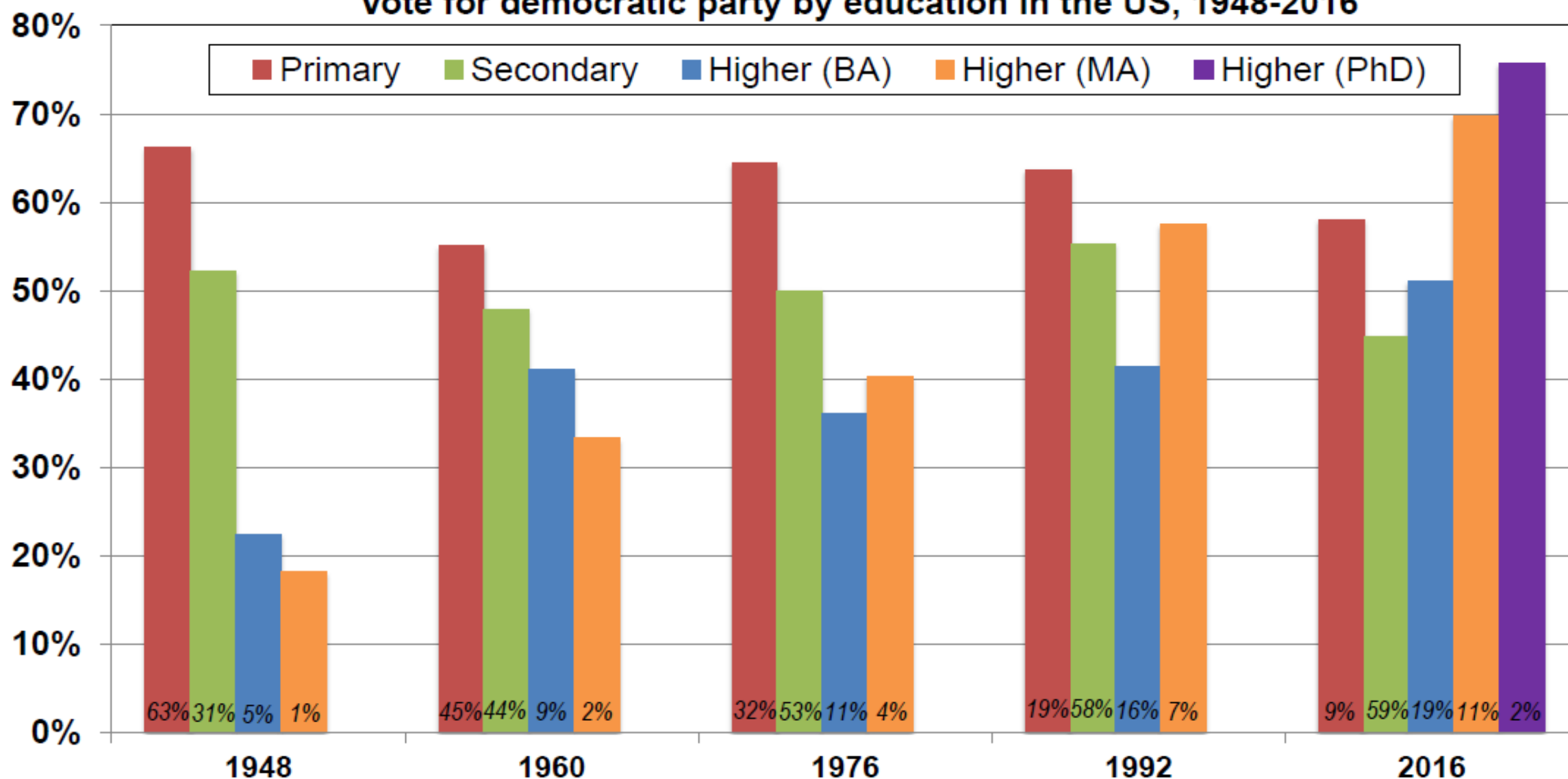
Political conflict and national-ethnic origins: France vs the US



Source: author's computation using French and US post-electoral surveys 1956-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2012, the French left-wing candidate (Hollande) obtained 49% of the vote among voters with no foreign origin (no foreign grand-parent), 49% of the vote among voters with European foreign origins (mostly Spain, Italy, Portugal, etc.), and 77% of the vote among voters with extra-European foreign origins (mostly Maghreb and sub-Saharan Africa). In 2016, the US democratic candidate (Clinton) obtains 37% of the vote among Whites, 64% of the vote among Latinos/others, and 89% of the vote among Blacks.

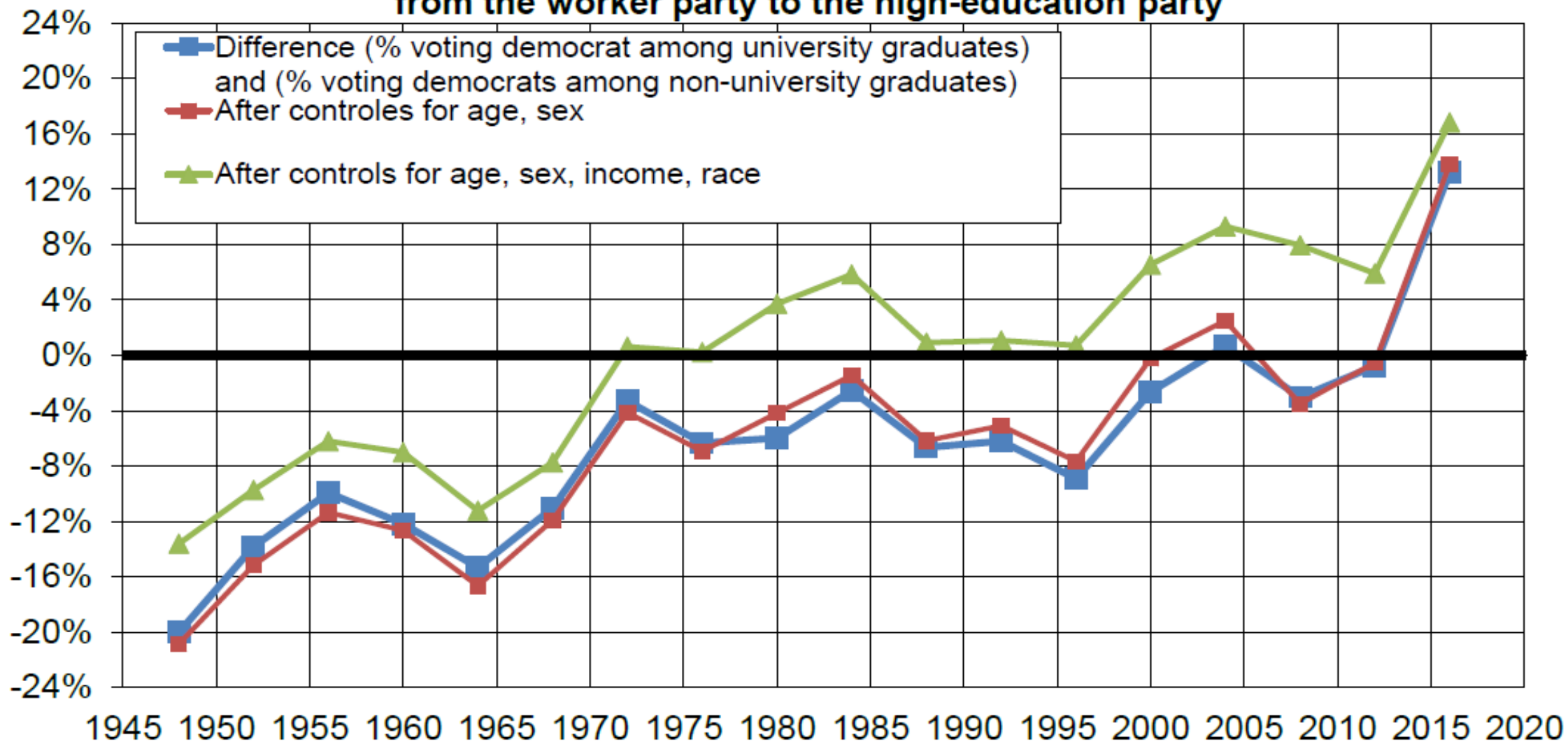
Vote for democratic party by education in the US, 1948-2016



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: in 2016, the democratic party candidate (Clinton) obtained 45% of the vote among high-school graduates and 75% among PhDs. Primary: voters with no high-school degree. Secondary: high-school degree but not bachelor degree. Higher (BA): bachelor degree. Higher (MA): advanced degree (master, law/medical school). Higher (PhD): PhD degree.

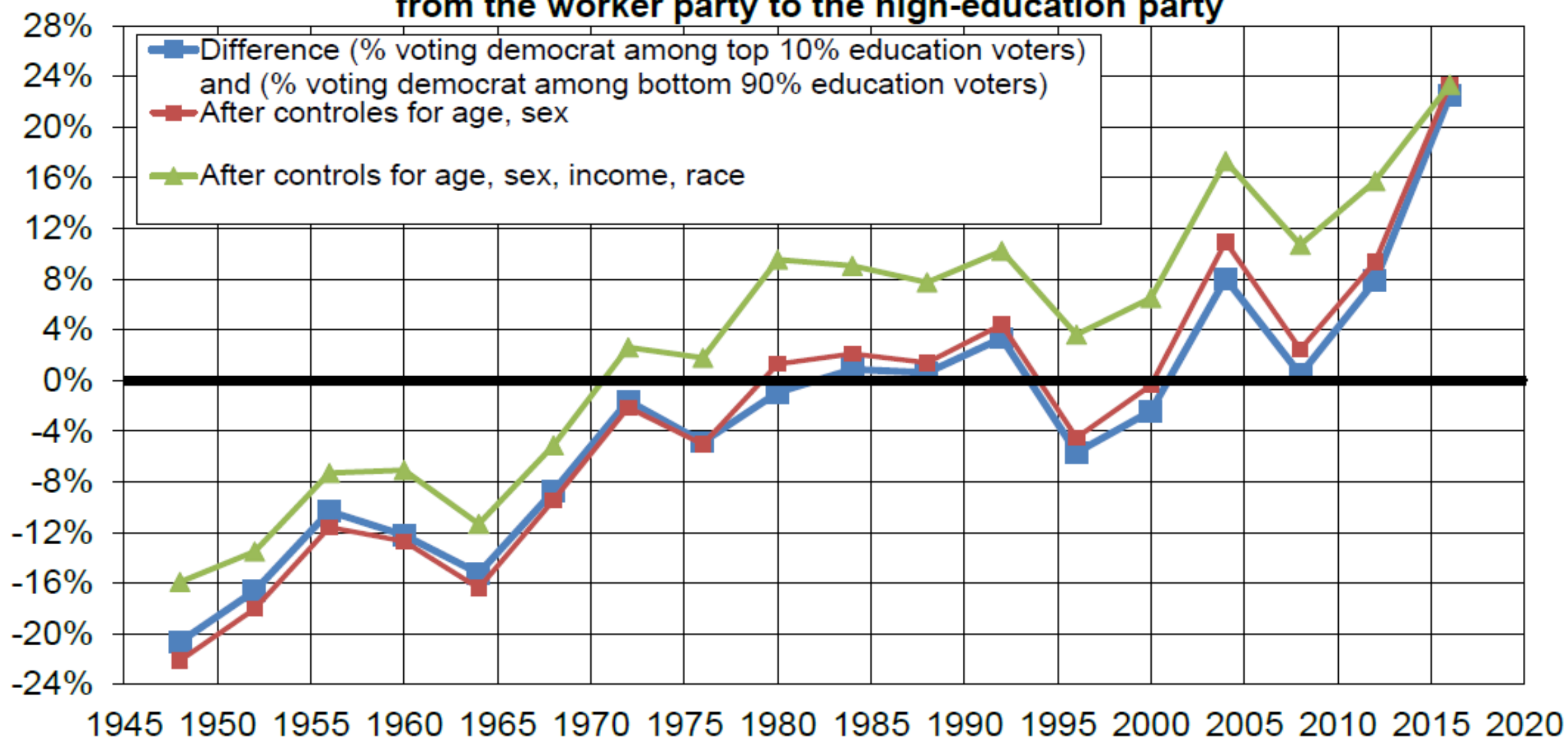
Voting for the democratic party in the US, 1948-2017: from the worker party to the high-education party



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: in 1948, the democratic candidate obtained a score that was 17 points lower among university graduates than among non-university graduates; in 2016, the score of the democratic candidate is 13 points higher among university graduates.

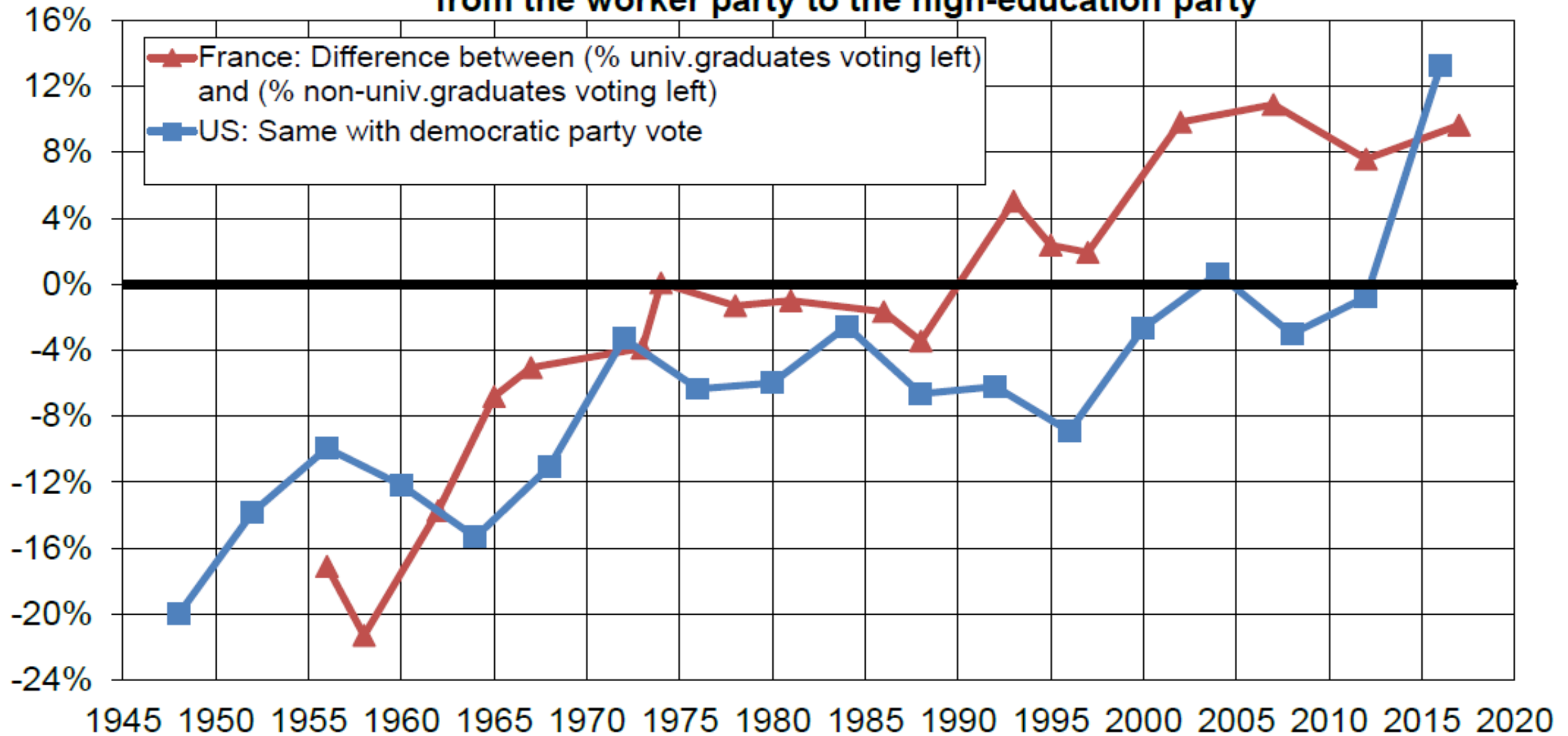
Voting for the democratic party in the US, 1948-2017: from the worker party to the high-education party



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: in 1948, the democratic candidate obtained a score that was 21 points lower among top 10% education voters than among bottom 90%; in 2016, the score of the democratic candidate is 23 points higher among top 10% education voters.

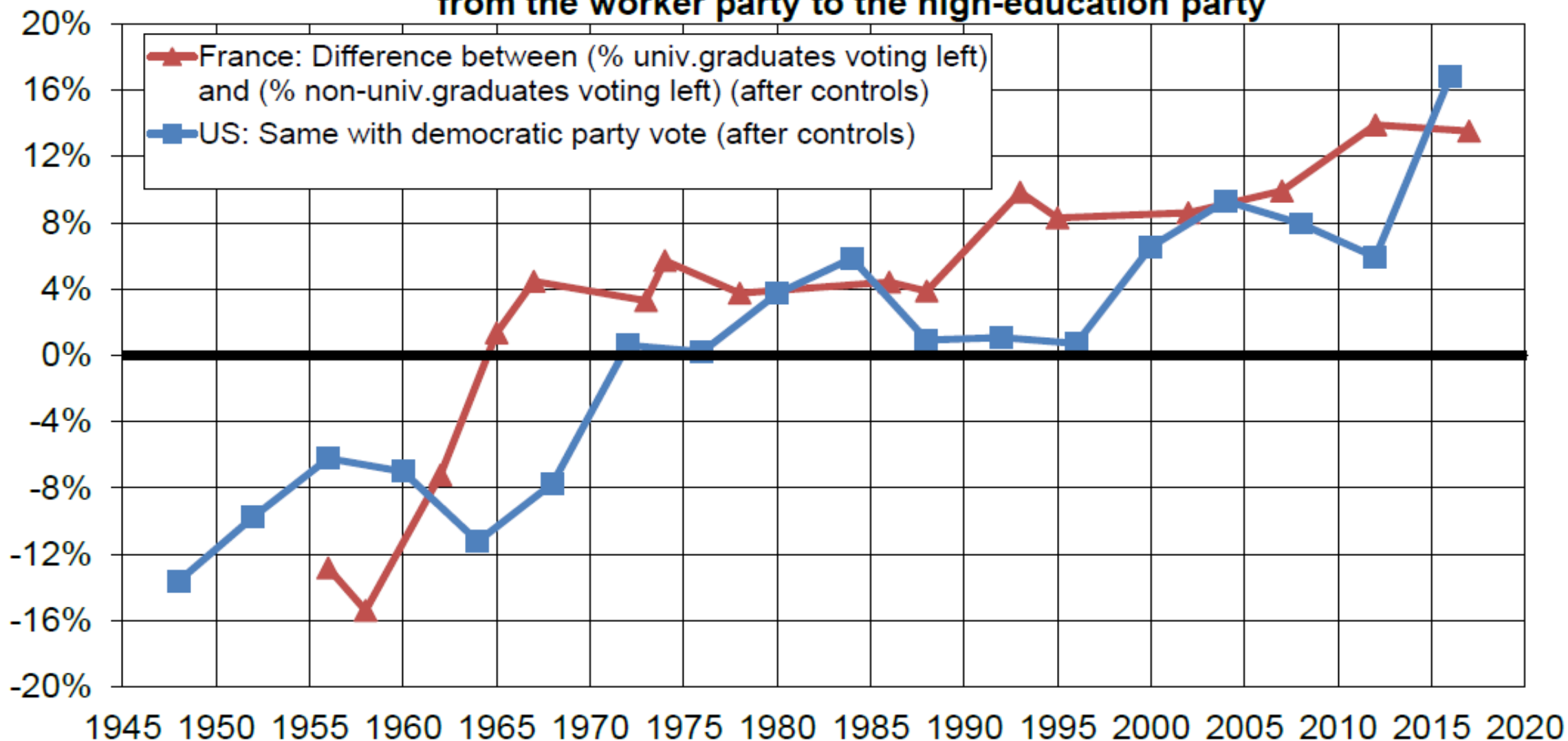
Voting for left-wing & democratic parties in France and the US, 1948-2017: from the worker party to the high-education party



Source: author's computations using French and US post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 17 points lower among university graduates than among non-university graduates in France; in 2012, their score is 9 points higher among university graduates. The evolution is similar for the democratic vote in the US.

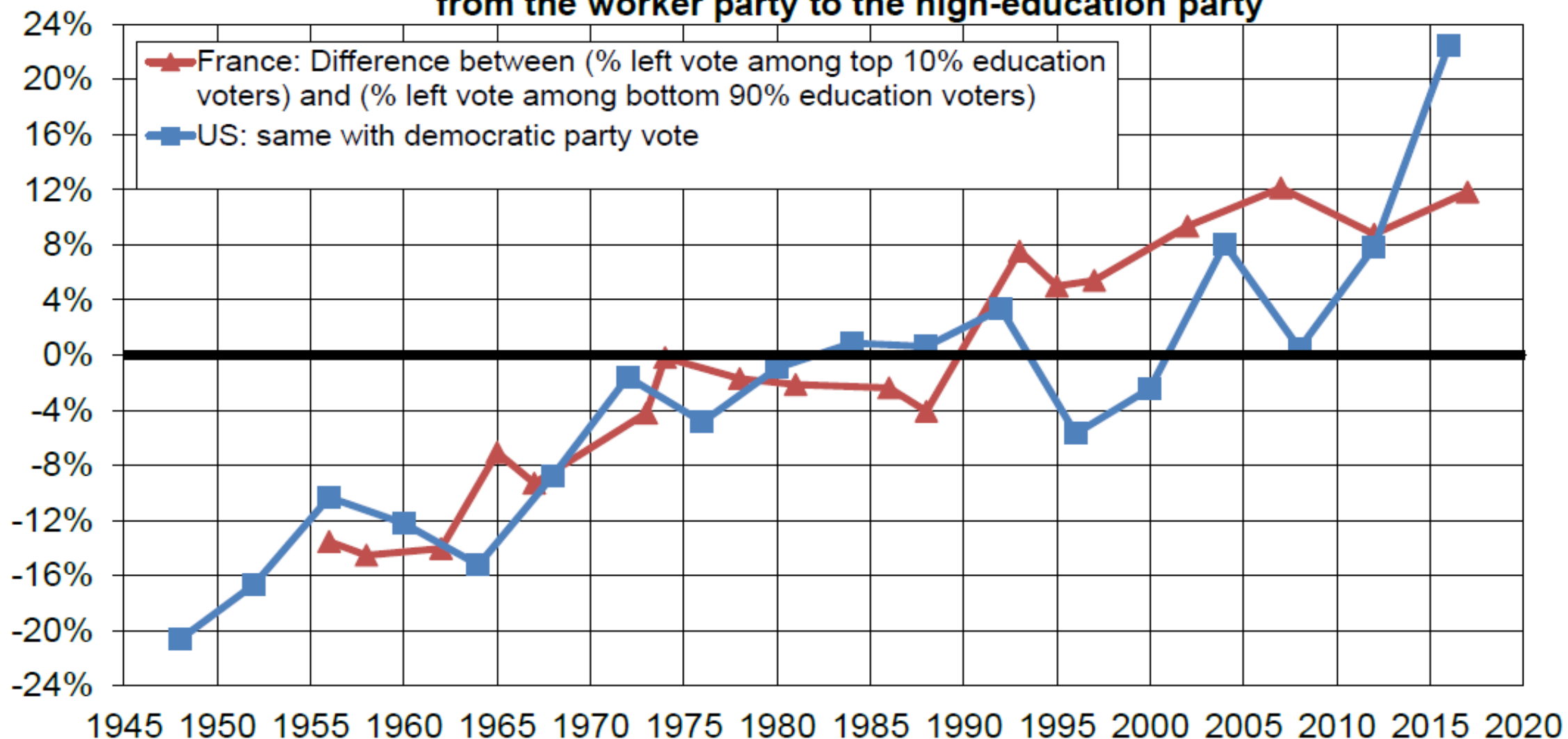
Voting for left-wing & democratic parties in France and the US, 1948-2017: from the worker party to the high-education party



Source: author's computations using French and US post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 14 points lower among university graduates than among non-university graduates in France; in 2012, their score is 13 points higher among university graduates (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for the democratic vote in the US.

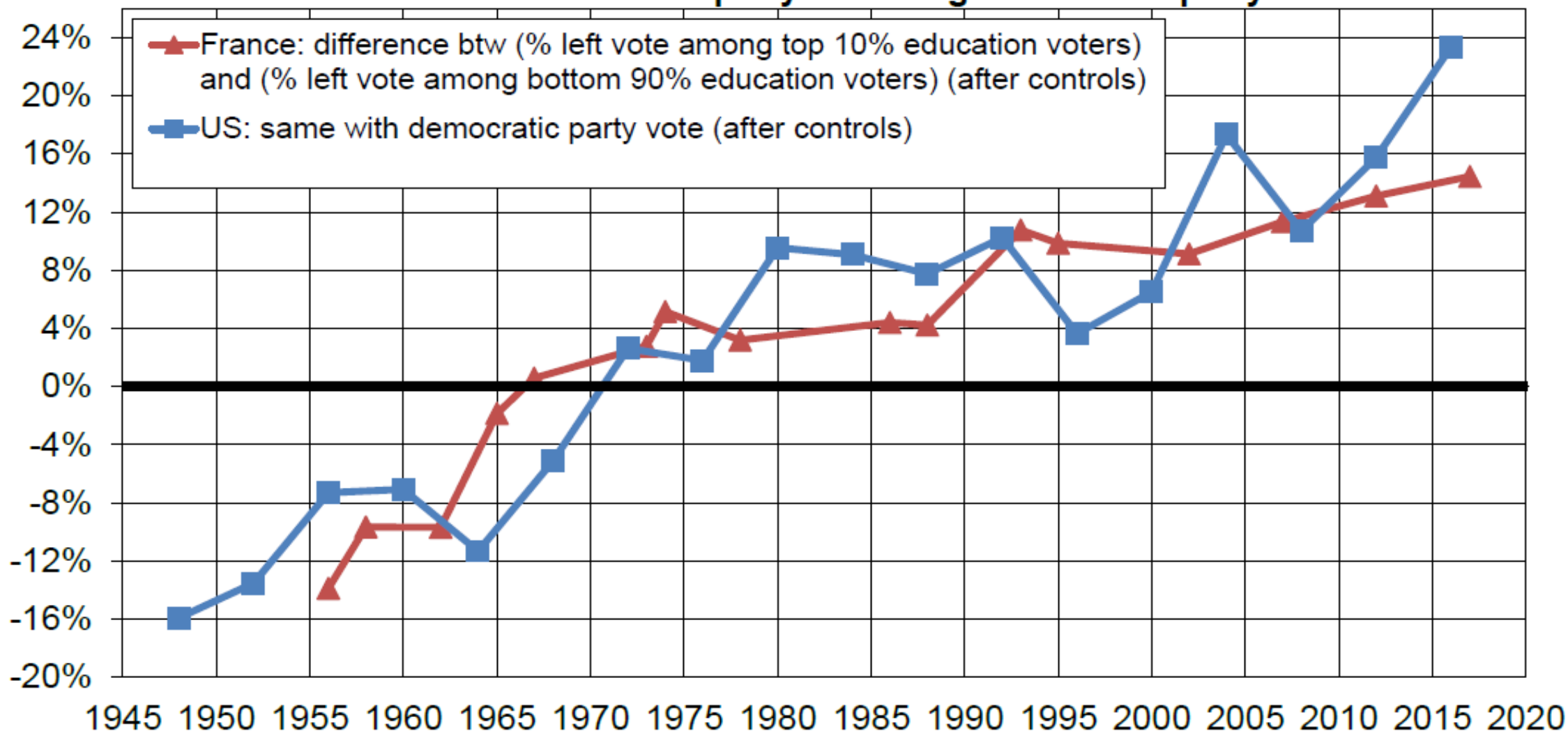
Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



Source: author's computations using French and US post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 14 points lower among top 10% education voters than among bottom 90% education voters in France; in 2012, their score is 9 points higher among top 10% education voters. The evolution is similar for the democratic vote in the US.

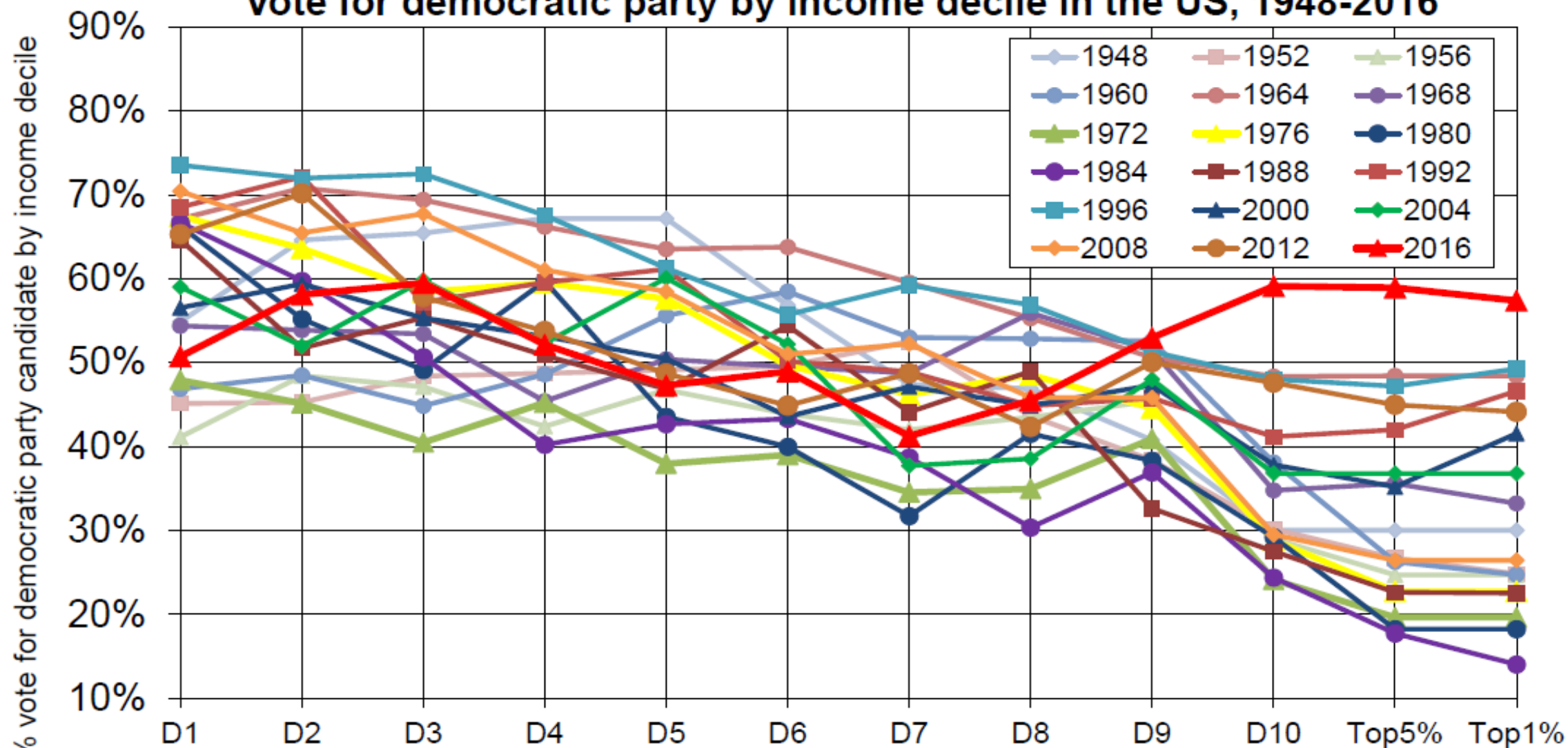
Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



Source: author's computations using French and US post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., etc.) obtain a score that is 14 points lower among top 10% education voters than among bottom 90% education voters in France; in 2012, their score is 13 points higher among university graduates (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for democratic vote in the US.

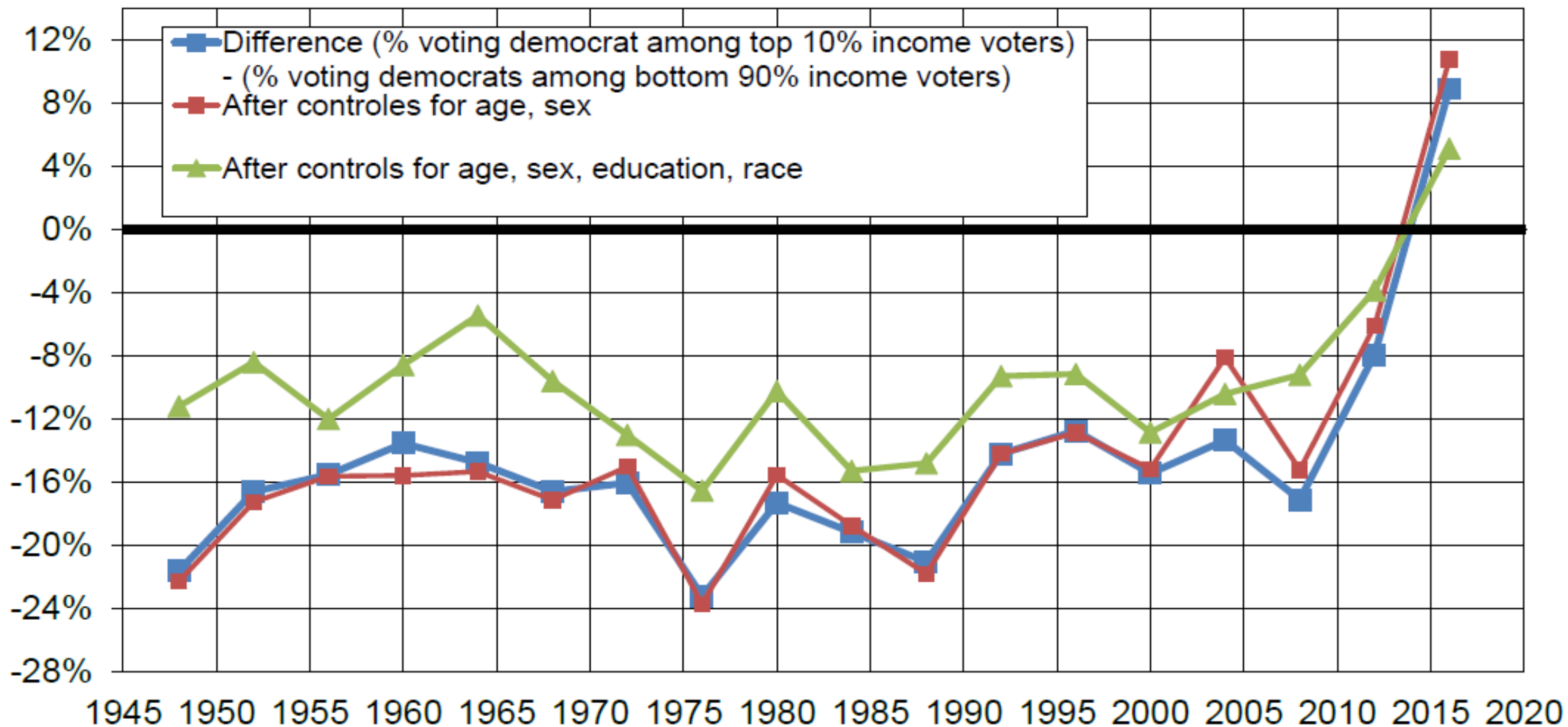
Vote for democratic party by income decile in the US, 1948-2016



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: the profile of voting for the democratic party candidate by income percentile is generally downward sloping, especially at the level of the top 10%, and particularly at the beginning of the period (from the 1950s to the 1980s). Since the early 1990s the profile is really flat at the top. In the 2016 presidential election, the profile is reversed: for the first time, top 10% voters support the democratic party candidate.

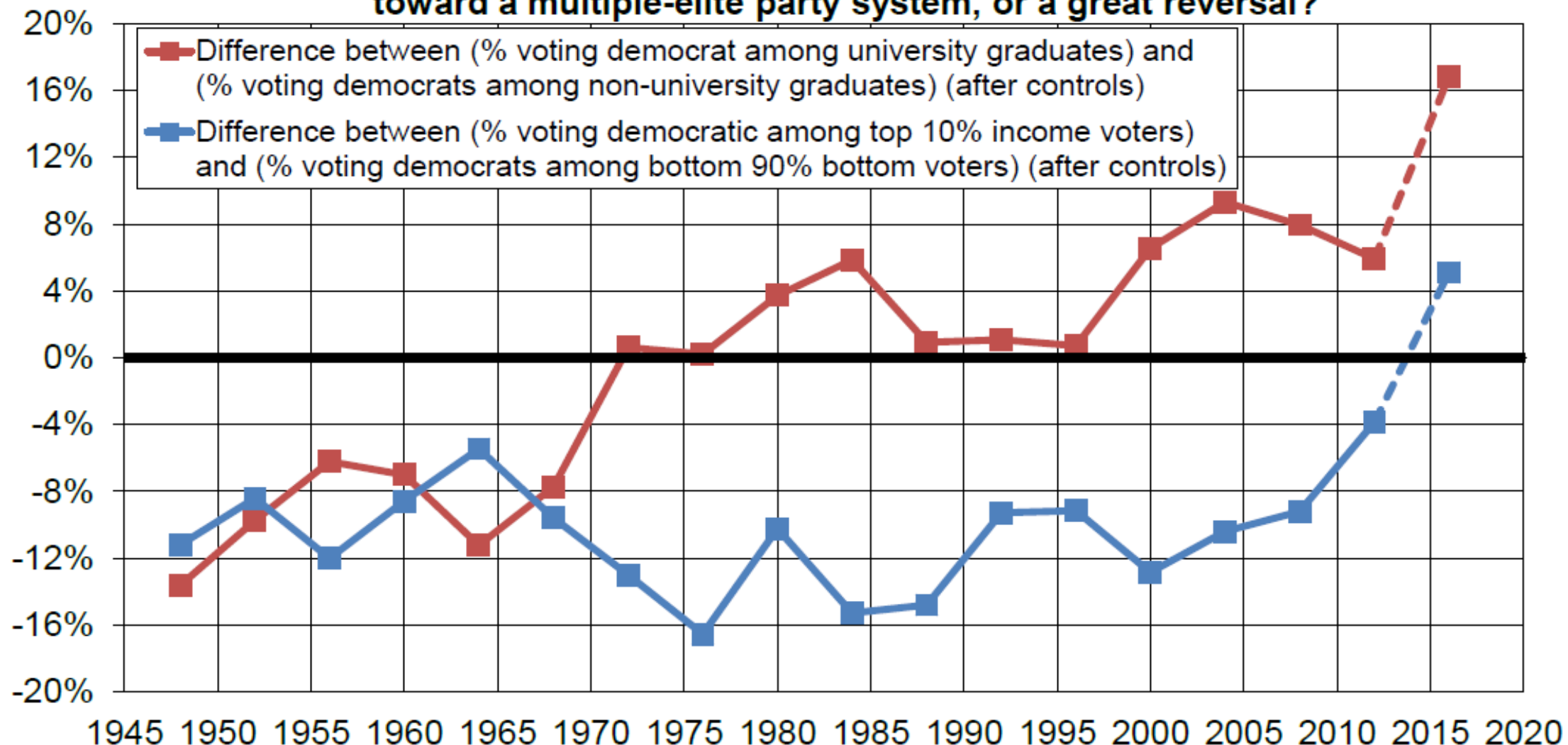
High-income vote in the US, 1948-2017: before and after controls



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: in 1948, the democratic candidate obtained a score that was 22 points lower among top 10% income voters than among bottom 90% income voters; in 2016, the score of the democratic candidate is 10 points higher among top 10% income voters.

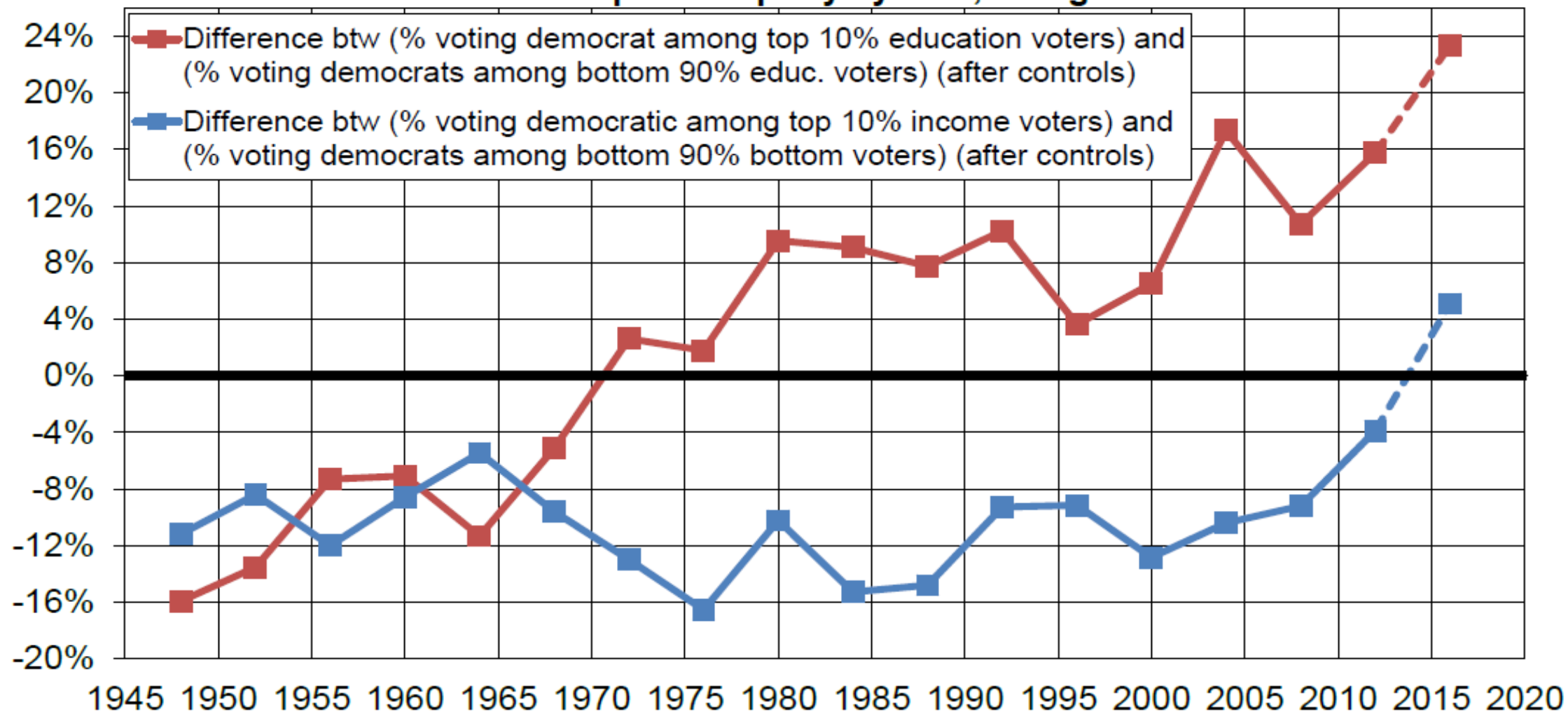
Political conflict in the US, 1948-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: the democratic vote used to be associated with low education and low income voters; it has gradually become associated to high education voters, giving rise to a "multiple-elite" party system (education vs income); it might also become associated with high income voters in the future, giving rising to great reversal and complete realignment of the party system.

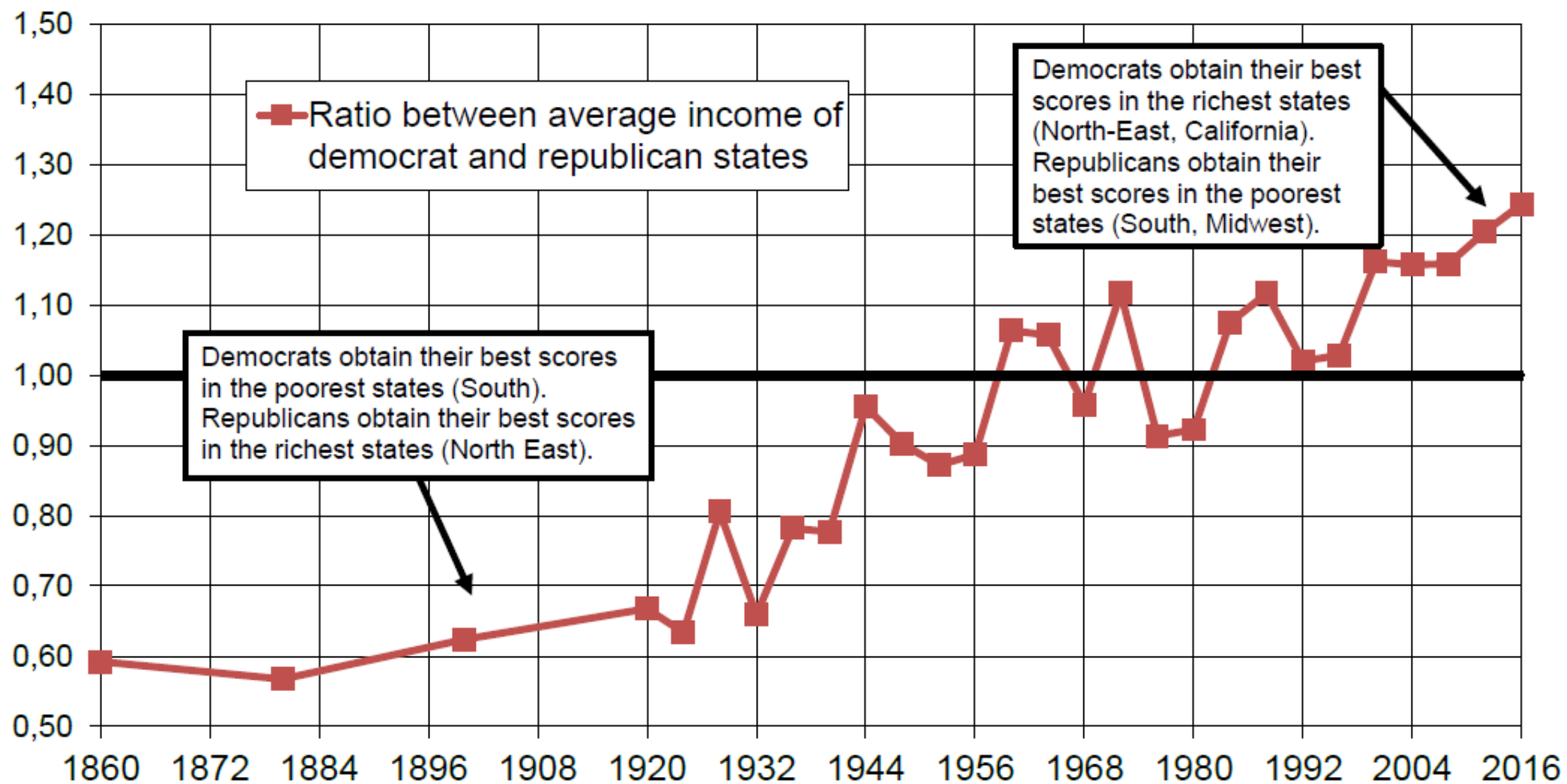
Political conflict in the US, 1948-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using US post-electoral surveys 1948-2016 (ANES) (see piketty.pse.ens.fr/conflict)

Reading: the democratic vote used to be associated with low education and low income voters; it has gradually become associated to high education voters, giving rise to a "multiple-elite" party system (education vs income); it might also become associated with high income voters in the future, giving rising to great reversal and complete realignment of the party system.

The great geographical reversal of US political conflict, 1860-2016

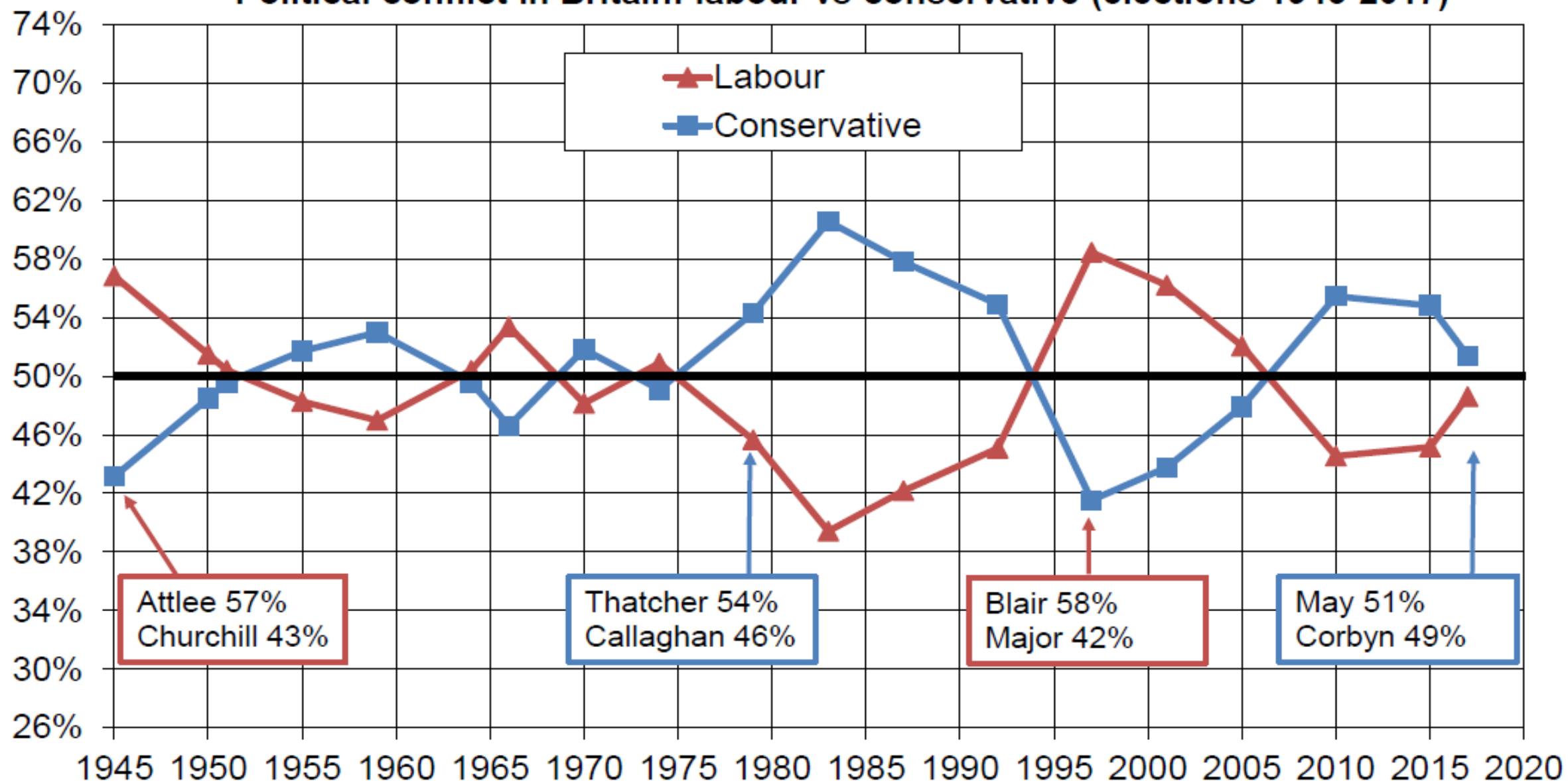


Source: author's computations using US presidential election results 1860-2016 and state-level series for average incomes.
Reading: from the 1860s to the 1950s, the average income of states where democrats obtained their best score (half of states with best score for democratic candidate) is lower than the average income of states where republicans obtained their best scores (other states); beginning in the 1960s, and systematically since the 1980s, the opposite pattern prevails.

3. Evidence from Britain

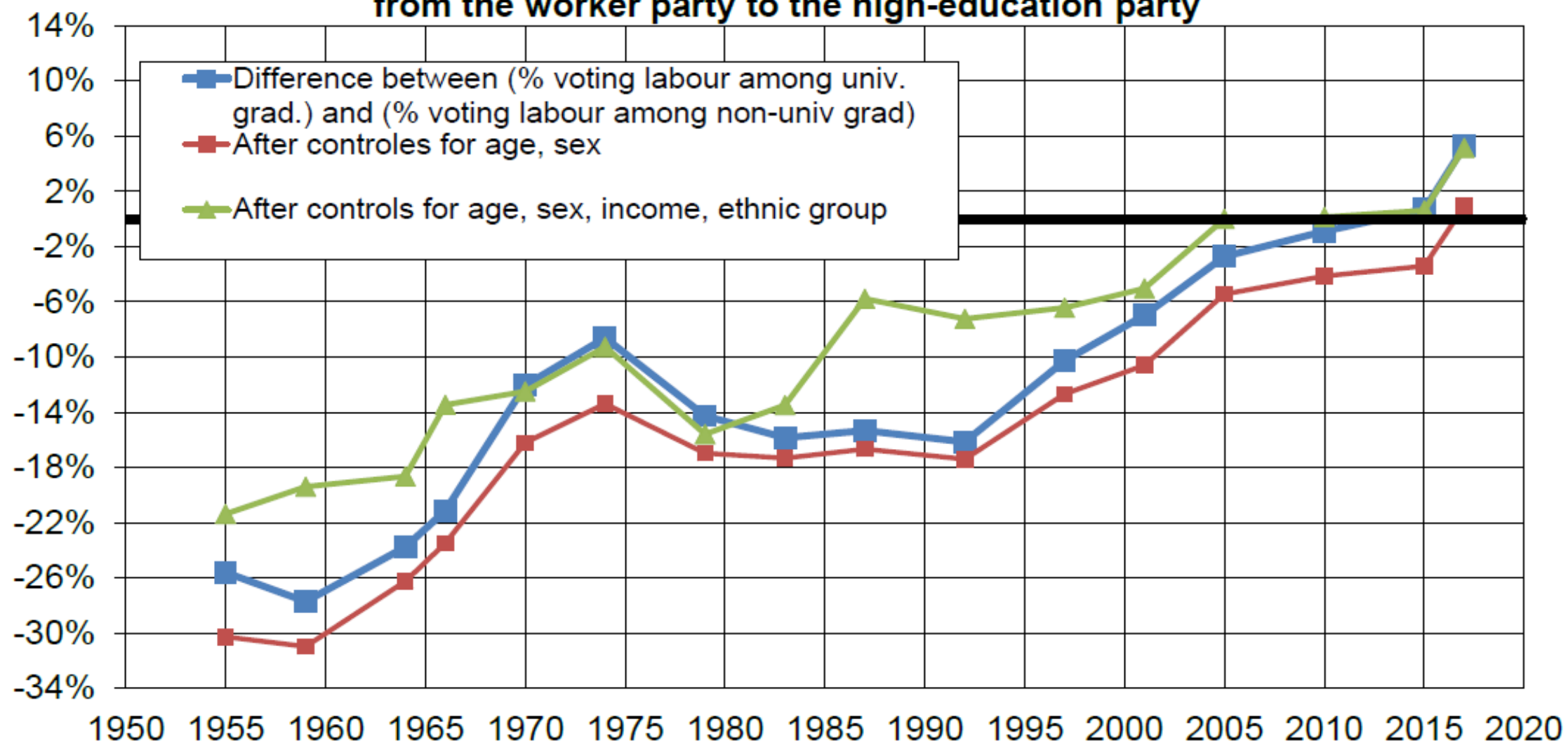
- Long tradition of post-electoral surveys: 1963-2017 BES surveys; sample size : 4000 obs/survey in recent years, but 1000-2000 in early years
- Unfortunately British surveys ask few questions on wealth (less than in France, but more than in the US)
- I start by presenting results on changing voting patterns by **education**, then **income**, so as to compare multiple-elite result with France and US
- **Britain: party system fairly different from France (socialist-communist split, ≠ unified Labour party) and US (democrats=ex-slavery party), but same evolution of education vs income cleavage since 1950s: very striking**
- Same pattern as France regarding muslim vote: from <1% of the electorate till 1980s-90s up to 5% in 2017, with 80-90% vote for labour (not shown here)

Political conflict in Britain: labour vs conservative (elections 1945-2017)



Percentage of popular vote obtained by labour and conservative parties in British legislative elections 1945-2017 (excluding other parties). Source: see piketty.pse.ens.fr/conflict.

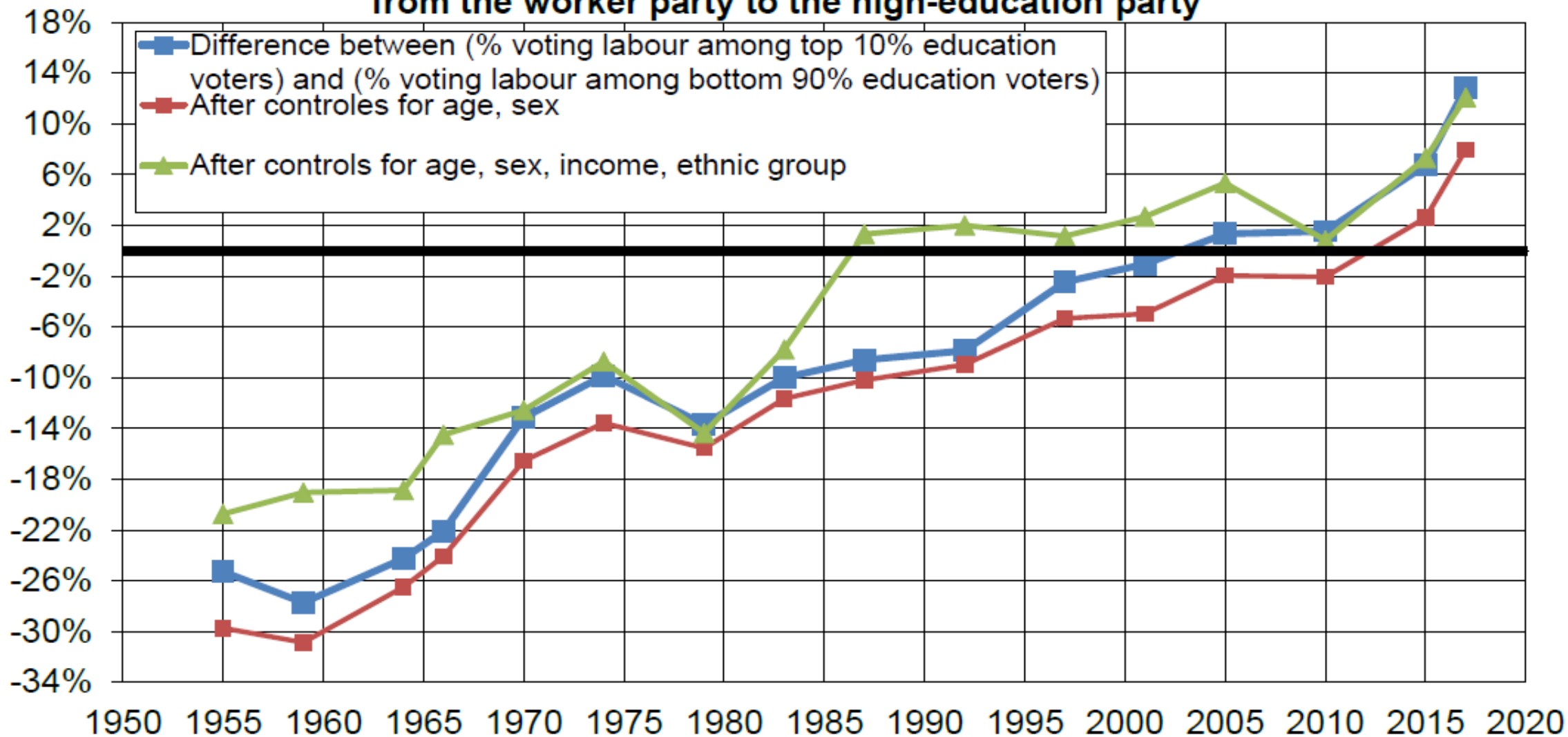
Voting for the labour party in Britain, 1955-2017: from the worker party to the high-education party



Source: author's computations using British post-electoral surveys 1963-2017 (BES) (see piketty.pse.ens.fr/conflict)

Reading: in 1955, the labour party obtained a score that was 26 points lower among university graduates than among non-university graduates; in 2017, the score of the labour party is 6 points higher among university graduates. Controls alter levels but do not affect trends. Note: here "university graduates" include both technical and general higher-education degrees.

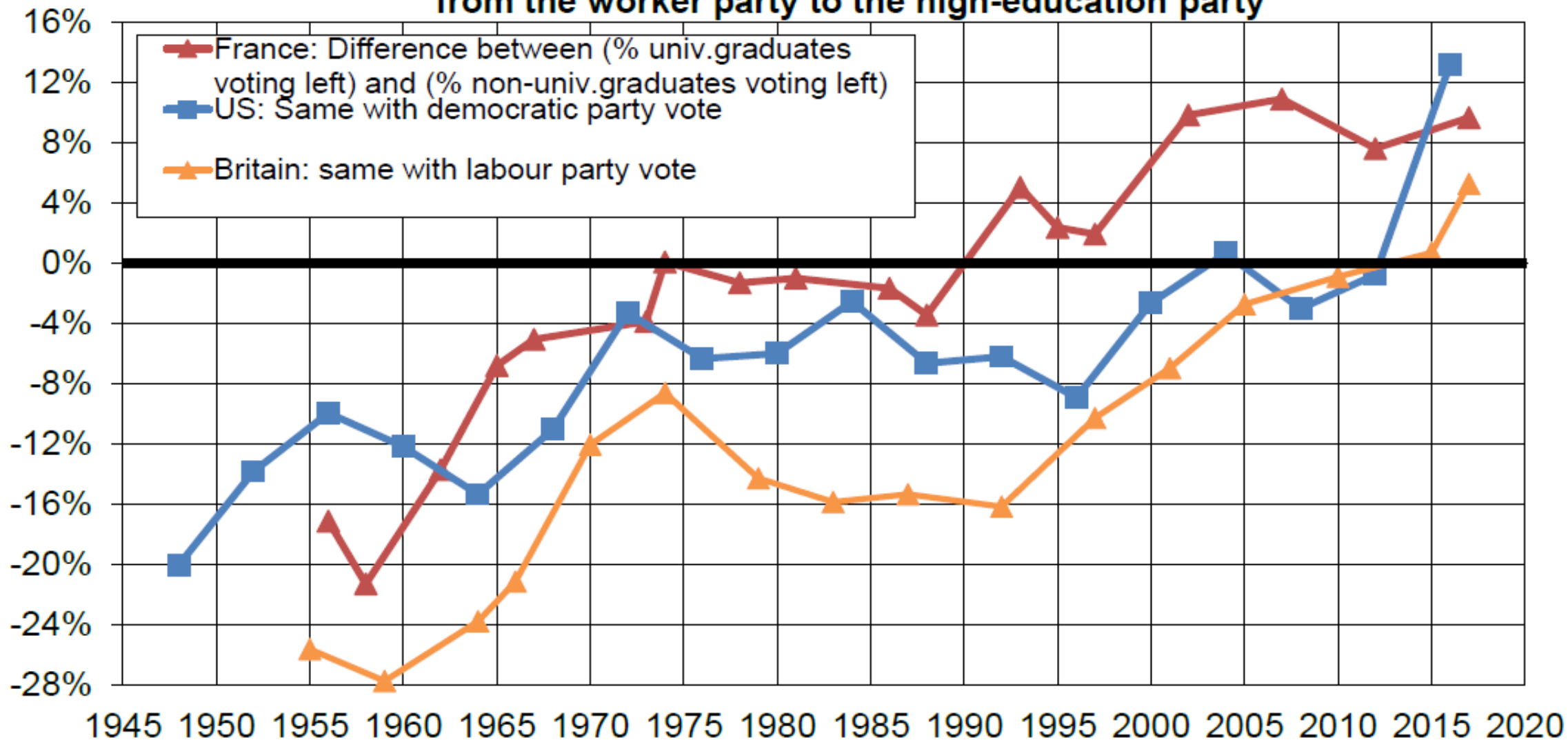
Voting for the labour party in Britain, 1955-2017: from the worker party to the high-education party



Source: author's computations using British post-electoral surveys 1963-2017 (BES) (see piketty.pse.ens.fr/conflict)

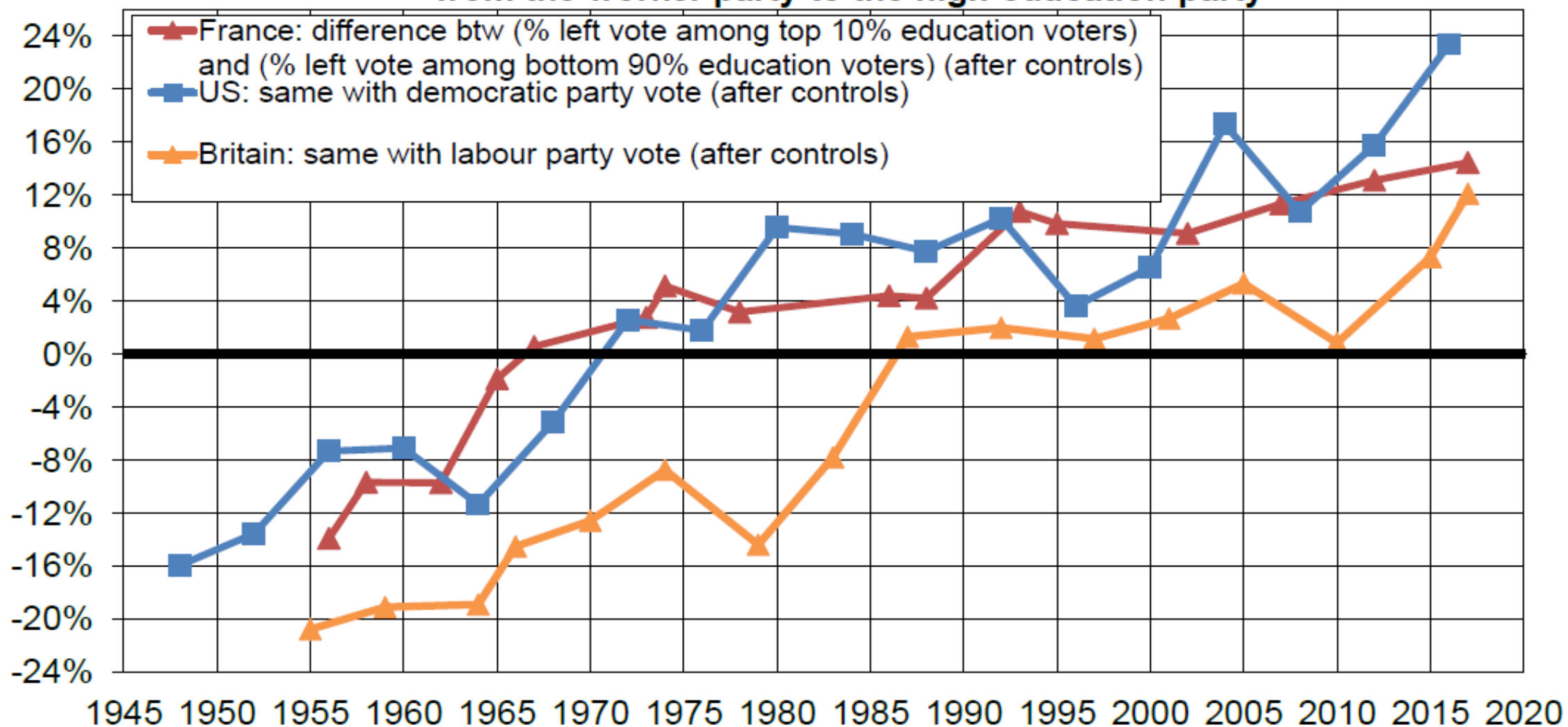
Reading: in 1955, the labour party obtained a score that was 25 points lower among top 10% education voters than among bottom 90% education voters (registered voters are ranked by highest degree); in 2017, the score of the labour party is 13 points higher among top 10% education voters. Controls alter levels but do not affect trends.

Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



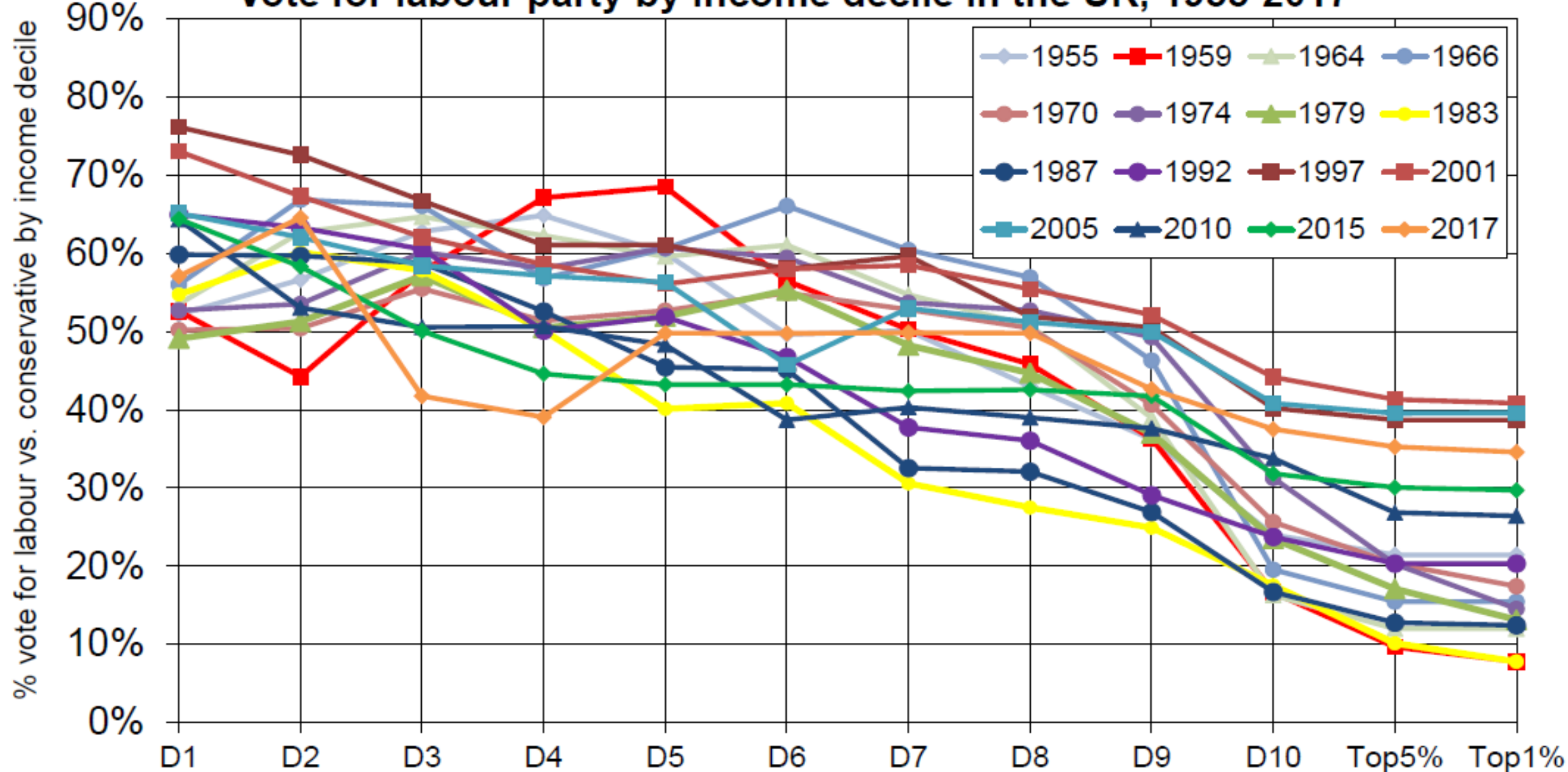
Source: author's computations using French, US and British post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 17 points lower among university graduates than among non-university graduates in France; in 2012, their score is 9 points higher among university graduates. The evolution is similar for the democratic vote in the US and the labour vote in Britain.

Voting for left-wing & democratic parties in France, Britain, US 1948-2017: from the worker party to the high-education party



Source: author's computations using French, US and British post-electoral surveys 1948-2017 (see piketty.pse.ens.fr/conflict)
Reading: in 1956, left parties (SFIO-PS, PC, Rad., etc.) obtain a score that is 14 points lower among top 10% education voters than among bottom 90% education voters in France; in 2012, their score is 13 points higher among top 10% educ.voters (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for democratic vote in the US and labour vote in Britain.

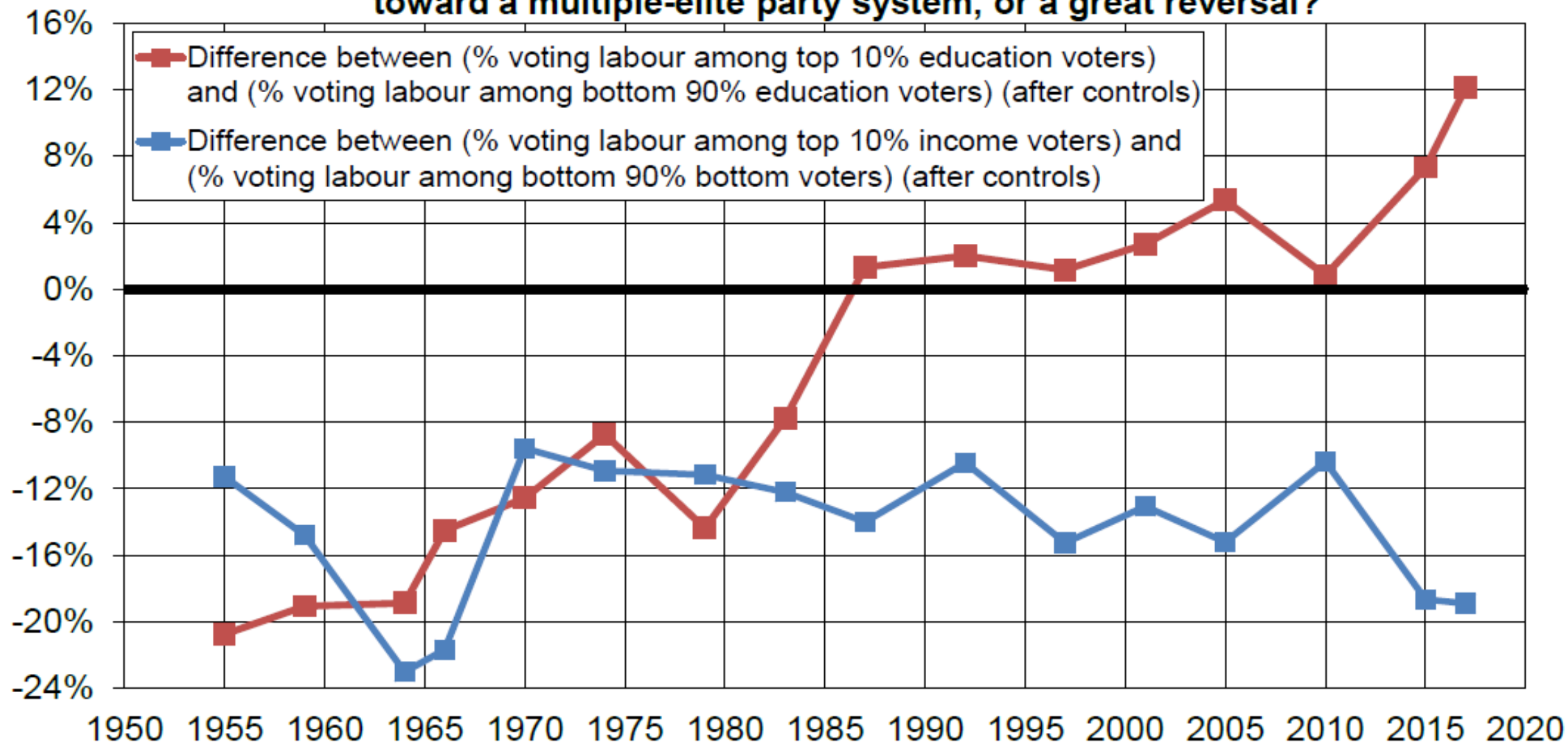
Vote for labour party by income decile in the UK, 1955-2017



Source: author's computations using UK post-electoral surveys 1963-2017 (BES) (see piketty.pse.ens.fr/conflict)

Reading: the profile of voting for the labour vs. conservative (excluding other votes) by income percentile is generally downward sloping, especially at the level of the top 10%, and particularly at the beginning of the period (from the 1950s to the 1980s).

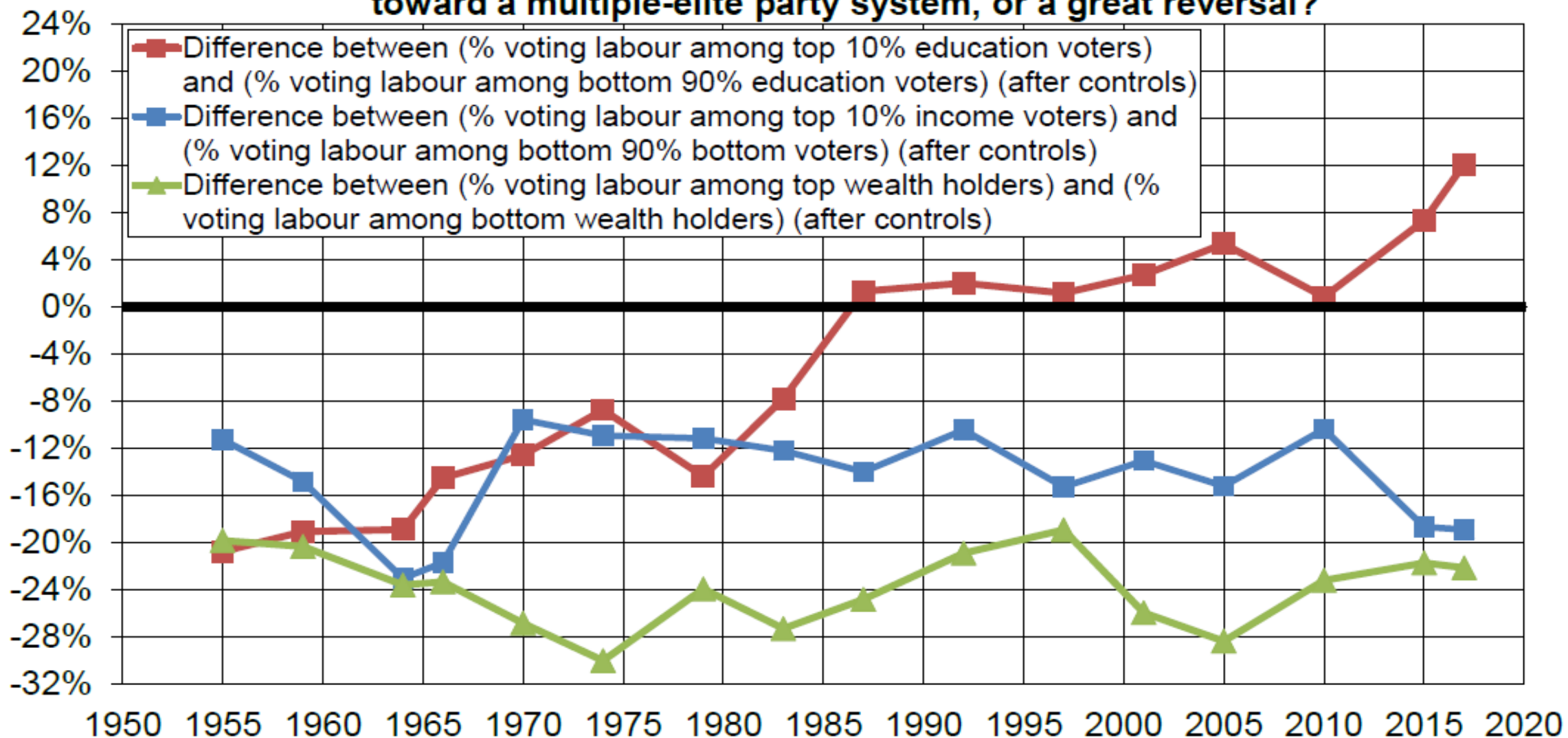
Political conflict in Britain, 1955-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using British post-electoral surveys 1963-2017 (BES) (see piketty.pse.ens.fr/conflict)

Reading: the labour vote used to be associated with low education and low income voters; it has gradually become associated to high education voters, giving rise to a "multiple-elite" party system (education vs income); it might also become associated with high income voters in the future, but at this stage this scenario seems less likely in Britain than in France or the US.

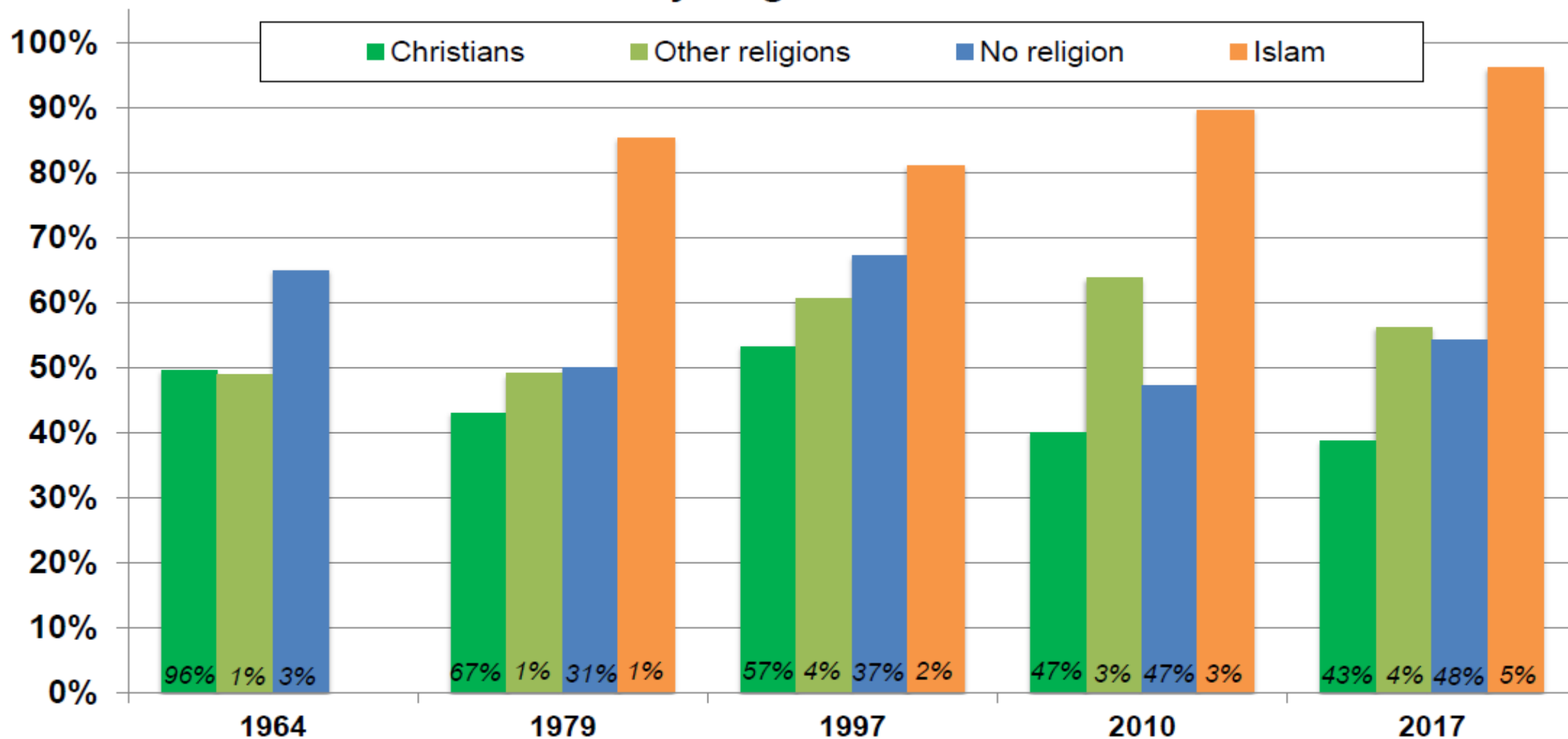
Political conflict in Britain, 1955-2017: toward a multiple-elite party system, or a great reversal?



Source: author's computations using British post-electoral surveys 1963-2017 (BES) (see piketty.pse.ens.fr/conflict)

Reading: the labour vote used to be associated with low education and low income voters; it has gradually become associated to high education voters, giving rise to a "multiple-elite" party system (education vs income); it might also become associated with high income voters in the future, but at this stage this scenario seems less likely in Britain than in France or the US.

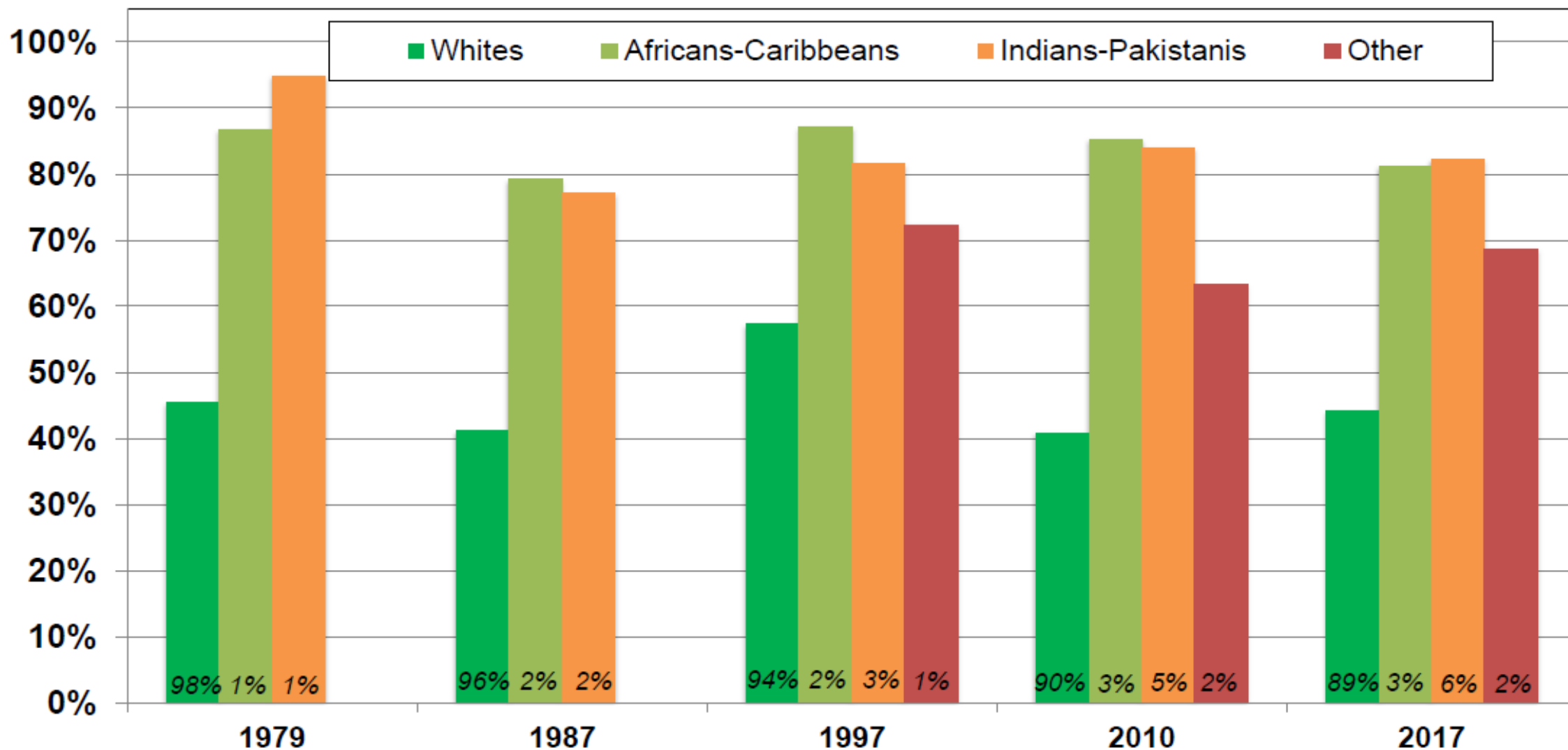
Labour vote by religion in Britain 1964-2017



Source: author's computations using British post-electoral surveys 1963-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2017, the labour party obtains 39% of the vote among self-reported Christians (inc. Anglicans, other Protestants, Catholics), 56% among voters reporting other religions (Judaism, Hinduism, etc., except Islam), 54% among voters reporting no religion, and 96% among self-reported Muslims. Before 1979, Islam is included with other religions.

Labour vote by ethnic group in Britain 1979-2017



Source: author's computations using British post-electoral surveys 1963-2017 (see piketty.pse.ens.fr/conflict)

Reading: in 2017, the labour party obtains 41% of the vote among self-reported ethnic "Whites", 81% among among "Africans-Caribbeans", 82% among "Indians-Pakistanis-Bengladeshis" and 69% among "Other" (including "Chinese", "Arabs", etc.).

Note: in 2017, 5% of voters refused to answer the ethnic identity question (and 77% of them voted Labour) (not shown here).

4. Open questions

- **Open question n°1:** could the transition to a multiple-elite party system have happened without the rise globalisation/immigration cleavage?
- **Open question n°2:** can multiple-elite systems persist, or will the high-education and high-income voters unite again in the long-run?

Open question n°1: could the transition to a multiple-elite party system have happened without globalisation/immigration cleavage?

- The rise of the globalisation/immigration cleavage certainly facilitates the transition: vertical redistribution more difficult + association between high educ & universalist/multicultural values; key role of racism/anti-minority strategy in rise of Nixon/Reagan/Thatcher, and later of LePen/Brexit/Trump
- **But multiple-elite party systems can also happen without the external-inequality dimension: education effort vs business effort meritocratic cleavage.**
- **I.e. rise of higher education has created new political cleavages: end of egalitarian policy platform associated to primary and secondary education.**
- Some of the oldest party systems are multiple-elite: e.g. Tories/Conservatives vs Whigs/Liberals in UK 18c-19c (landed elite vs urban-business elite)
- Of course this was the time of restricted suffrage (only top 1% could vote); but today's universal suffrage is limited by unequal political finance, control of the media by intellectual and business elites, etc.: Brahmin Left vs Merchant Right
- **Do we see multiple-elite cleavages in countries less exposed to globalisation/immigration?** Sometime yes. On-going research in developed countries (Germany, Spain, Italy, Japan, Australia, Poland, Hungary etc.) and emerging countries (Brazil, India, etc.).

Open question n°2: can multiple-elite systems persist, or will the high-education and high-income voters unite in the long-run?

- **To the extent that high educ commands high income/high wealth in the long-run, multiple-elite party systems are inherently unstable: elites tend to unite**
- US 2016, FR 2017 : evidence that we may be moving toward a complete realignment of the party system, « globalists » (high-education, high-income) vs « nativists » (low-education, low-income). E.g. like Rep vs Dem US 19c.
- This itself could be unstable: in the US, pro-slavery/segregationist democrats gradually became the New Deal Party (defending poor whites can lead to develop policies which also benefit poor blacks). **Racist left trajectory?**
I.e. will Fidesz/Front National/AfD become the Democrats of 21c Europe?
- **We are not there yet: multiple-elite party systems can persist because of different careers and values (high educ doesn't always lead to high income).** And rise of new internationalist-egalitarian platform is also possible. UK?
- With many-dimensional politics, many bifurcations are possible. Actors matter.

Internationalizing the study of nationalist-racial-ethnic cleavages

- This work builds upon the enormous political science literature using party platforms, parliamentary debates, electoral surveys, etc. in order to study the evolution of party systems and electoral cleavages.
- **Lipset-Rokkan 1967**, *Cleavage structures, party systems and voter alignments*. Modern democracies are characterized by two major revolutions – national and industrial – that have generated four main cleavages, with varying importance across countries: center vs periphery; state vs churches; agriculture vs manufacturing; workers vs employers/owners. **No racial/ethnic dimension?**
- **Bornshier 2010**, *Cleavage Politics and the Populist Right*. The rise of universalist/liberal vs traditionalist/communitarian values since 1980s-90s, following the rise of higher education, has created the conditions for a new cleavage dimension, and for rise of the Populist Right. **Focuses on Europe.**

- **I build upon this political science/historical literature**
- **Main novelty: systematic use of historical survey and electoral data in order to construct long-run series on voting profiles by education/income/wealth deciles, so as to recover long-run changes in cleavages structure.**
- Previous studies looked at shorter periods and/or do not decompose the income, wealth and education dimensions in systematic manner. Often relied on categories (like blue-collar workers) which are relevant to characterize a given period but do not allow for long-run comparisons.
Better to use education/income/wealth deciles for long-run analysis.
Same issue as for inequality series.
- **Racial/ethnic cleavages are central and can be better understood in a comparative perspective.** E.g. US 19c: Democrats gradually shifted from slavery party to the party of the poor whites, the New Deal party, and finally the party of the rich whites and the poor minorities. Strange from a European 19c-20c party-system perspective, but relevant for Europe 21c.
- **Bottom line: one needs long-run historical comparative series to study the political economy of inequality and redistribution. And other issues as well.**

Conclusions

- **Globalisation/migration (domestic vs external inequality) and educational expansion (education vs property inequality) have created new multi-dimensional conflicts about inequality**
- Why didn't democracy reduce inequality?
- Because multi-dimensional coalitions are complicated
- Without a strong egalitarian-internationalist platform, it's difficult to have the low-education, low-income voters from all origins vote for the same party. **Racism/nativism & higher education = powerful forces dividing the poor if there's no strong uniting platform.**
- Politics has never been a simple poor vs rich conflict; one needs to look at the multi-dimensional content of political cleavages
- Social sciences can help

Supplementary slides: Multi-dimensional models of inequality & redistribution

- A simple one-dimensional model of beliefs-based political conflict on redistribution: « Social Mobility and Redistributive Politics », QJE 1995
- One needs to introduce other dimensions into the model in order to account for what we observe:

Vertical redistribution vs attitudes toward globalization/migration
i.e. domestic vs external inequality

Inequality in education vs inequality in wealth

A quick summary of « Social Mobility and Redistributive Politics » (QJE 1995)

- Two possible income levels: $y_0 < y_1$
- y_0 = low-paid job; y_1 = high-paid job
- Probability ($y_i=y_1$) = $\pi_0 + \theta e_i$ if parental income = y_0
- Probability ($y_i=y_1$) = $\pi_1 + \theta e_i$ if parental income = y_1

With e_i = effort, θ = **index of how much individual effort matters**,
 $\Delta\pi = \pi_1 - \pi_0$ = **index of how much inequality in social origins matters**

Different beliefs in effort vs social origins (partly determined by different mobility trajectories) determine different political preferences for redistribution

Assume we initially start from a one-dimensional policy conflict about domestic redistributive tax rate T_L (left) > T_R (right), with the poor having more left-wing beliefs on redistribution than the rich (on average)

= standard « class-based » party system (1950s-1960s)

Two-dim model 1: domestic inequality vs external inequality

- Introducing globalization: in addition to policy dimension T_L vs T_R (redistributive domestic tax rate between rich and poor), assume there's also some other dimension: openness/migration with $O_L > O_R$
- As conflict about $O_L > O_R$ becomes more salient (rise of extra-European migration in Europe, rise of civil rights/latinos in US), some the poor start to vote for the right, assuming preferences for $O_L > O_R$ are correlated with education and income
- Further assume that globalization makes it easier to evade taxes: by putting dissimulation effort f then high-income taxpayers can manage with proba ωf to pretend that they have y_0 instead of y_1
- With ω large enough, then the policy conflict about redistribution vanishes: both T_L and T_R close to 0 \rightarrow the political conflict gradually focuses on $O_L > O_R \rightarrow$ « **globalists** » vs « **nativists** » party system

Two-dim model 2: education inequality vs wealth inequality

- Introducing educational expansion: with rise of higher education, not possible to provide everyone with same education; depending on educational effort f_i , one face different chances to be admitted to selective higher education (education x_1 rather than x_0)
- Probability ($x_i=x_1$) = $\alpha_0 + \phi f_i$ if parental education = x_0
- Probability ($x_i=x_1$) = $\alpha_1 + \phi f_i$ if parental education = x_1
- Higher education increases probability to access a high-paid job:
- Probability ($y_i=y_1$) = $\pi_0 + \theta e_i + \mu s$ if $x_i=x_1$ (& parental income = y_0)

→ « **multiple-elite** » party system: Brahmin left believes more in education-related effort parameter ϕ , while Merchant right believes more in business-related effort parameter θ