

# The Long-Term Effects of Communism in Eastern Europe

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**T**hirty years after the fall of the Iron Curtain, the countries of Eastern Europe have undergone a massive transformation from centrally planned to market economies and from nondemocratic regimes to democratic ones. The speed of these transformations and the experiences along the way have been very heterogeneous in terms of both initial conditions and outcome variables. As one salient example, consider the transition to membership to the European Union (EU). Already in 2004, just 15 years after the end of communism, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia were welcomed as new members of the EU. Bulgaria and Romania joined three years later, while the last country to become a member of the EU was Croatia in 2013. As of today, Albania, North Macedonia, Montenegro, and Serbia are candidate countries to the EU, Bosnia and Herzegovina has applied for candidate status, and there is an association agreement between Kosovo and the EU.

In this paper, we analyze the long-term effects of communism in Eastern Europe by considering four areas where communist and capitalist doctrines fundamentally differ. We confirm differences in data related to these areas right after the fall of the Iron Curtain and investigate whether these differences still exist (up to)

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30 years after the end of communism in both policies and preferences. Central to communism are strong government interventions in markets, severe limits on political freedom, and low inequality across incomes and genders. Therefore, to analyze the long-term effects of communism, we first document macro indicators related to these areas—that is, broad patterns related to government intervention in markets, political freedom, and inequality—and then analyze preferences pertinent to these defining aspects of communism.<sup>1</sup>

Regarding macro indicators, we first show that in terms of economic freedom, the Eastern European countries started out with lower levels but have now converged nearly to the levels of the West. This holds for a variety of indicators. Second, the same holds true for indices of democratization. Third, gross income inequality in Eastern Europe was lower than in the West in the first years after the fall of the Iron Curtain but rapidly rose to levels comparable to those of the West. At the same time, the social expenditure share in the East lags behind the one in the West, leading to at least similar net income inequality levels in both regions today, if not higher ones in the East. Finally, indicators relating to gender equality in the labor market give a mixed picture: female labor force participation, while initially high in the East, fell to levels below the West, and the gender wage gap is similar in East and West. However, full-time work continues to be the norm for women in the East. In summary, the macro indicators seem to largely indicate rapid convergence of institutions and behavior toward the West.

Do we observe the same convergence for preferences? This question is of interest because the institutional changes in Eastern Europe, like greater market freedom and democracy, will be sustainable only if they have popular support. We focus on the same realms in which communist and capitalist societies differ and for which we document broad convergence in institutions: economic freedom, political freedom, income equality, and gender equality. In all of these areas, we find a lasting impact of communism on preferences.

A developing literature has investigated whether communism can be said to have causal effects on preferences. A large share of these papers focus on East and West Germany, with the notion that German separation and reunification provide a “natural experiment” (for an overview, see Fuchs-Schündeln and Schündeln 2005; Fuchs-Schündeln and Hassan 2016). As discussed in a companion paper in this issue by Becker, Mergele, and Woessmann that focuses on the German experience, one difficult issue here is to separate experience under communism from other long-standing social, economic, and political differences across countries or regions. An analysis based on cohort differences can control for these fixed differences. We offer cohort-based evidence that Eastern Europeans who lived longer under communism differ in their preferences toward governmental involvement in the economy, democracy, redistribution, and female labor force participation in ways that are more in line with the communist doctrine. This finding suggests

<sup>1</sup>For analyses of the transition, see the annual Transition Reports of the European Bank for Reconstruction and Development or Svejnar (2002) for an analysis of the first decade of the transition.

Table 1

**Definition of Country Groups**

<i>EU East</i>	<i>Non-EU East</i>	<i>West</i>
Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia	Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro, Serbia	Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

long-lasting effects of communism on preferences and is in line with the cohort-based findings by Alesina and Fuchs-Schündeln (2007), Fuchs-Schündeln and Schündeln (2015), and Pop-Eleches and Tucker (2017).

Throughout our discussion, we focus on 17 countries in Central and Eastern Europe, including the countries that formerly belonged to Yugoslavia and the Baltic countries. With the exception of the three Baltic countries Estonia, Latvia, and Lithuania, former Soviet Republics are excluded. For simplicity, we call these countries “Eastern European” or “East.” We group them into the two groups shown in Table 1, namely, those countries that today are members of the European Union (the “EU East”), and those that have not yet joined the European Union (the “non-EU East”). The latter group covers the countries of former Yugoslavia, except for Croatia, but plus Albania.

As Western European comparison countries, we focus on the countries belonging to the European Union before the Eastern enlargement (the former “EU-15” countries) but omit Germany, given its history of separation into East and West. The remaining 14 countries are listed in the third column of Table 1 and are simply referred to as “West.” Data are not always available for all countries listed in Table 1. The country composition of each of the three country groups for the following analyses is noted separately in each subsection.

A word is in order about the terminology in this paper. Most of the countries that we call former “communist” countries identified themselves, rather, as “socialist” countries as was often reflected in their official names (like the “Czechoslovak Socialist Republic” or “Socialist Federal Republic of Yugoslavia”). Here, we avoid trying to define a line between socialism and communism and simply use “communism” as a broad concept including what these countries referred to as socialism. Characteristics of the communist countries were strong elements of central planning of the economy with a high share of government-owned firms or cooperatives and limited and highly regulated markets. At the same time, communist regimes severely restricted democracy, typically by instituting a de facto one-party regime. The exact extent of communist elements in both the economic and political realms differed significantly from country to country (for discussions, see Kornai 1990; Estrin 1991, 2002). We use “capitalism” as a term defining democratic market economies of the West.

## **The Long-Term Effects of Communism: Macro Facts**

In this section, we document the developments of economic freedom, political freedom, and inequality across incomes and genders in the 30 years after the fall of communism. We use data on the country level from 1990, or the first available year, to 2019, or the most recent available year, thus ideally covering three decades. When building country group averages, we use a consistent set of countries over time in each figure. As a downside, the countries forming the group averages are changing slightly from one variable to another, since not all countries in each group have the full time series available for all variables. We detail the countries underlying the averages in notes and parenthetical comments throughout.<sup>2</sup>

To set the stage, we recap how Eastern European countries have fared in terms of one broad measure of development, GDP per capita, during the last 30 years. The former communist countries have exhibited higher growth rates than the West, but convergence is far from complete. Figure 1 shows average GDP per capita on a log scale in our three groups of countries: the EU East (red), the non-EU East (orange), and the West (blue). The figure shows continuously faster growth for the East than for the West countries over the three decades. For the non-EU East, initial GDP was very low. A number of countries for which we have data from 1990 onwards experienced a deep recession in the early 1990s, but convergence was rapid during the second half of the 1990s. The initial GDP level for the EU East was substantially higher.

However, convergence is far from complete: on average, GDP per capita in the EU East is 61 percent and in the non-EU East, 29 percent of that in the West in 2018. For context, Greece, the poorest country in the West, has a GDP per capita between those of Romania and Latvia. The Czech Republic, the richest country in the East, has a GDP per capita between those of Portugal and Spain. GDP per person employed, a rough measure of labor productivity, in the EU East is 58 percent of that in the West, and in the non-EU East, 36 percent of that of the West in 2018.

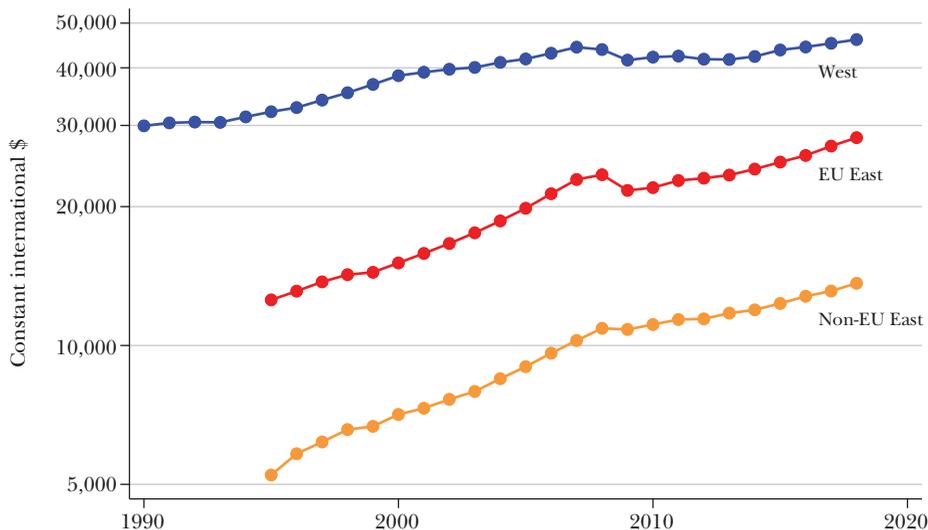
### **Economic Freedom**

Communist regimes impose economic structures based on central planning and a lack of free markets. On measures of economic freedom, the Eastern economies have evolved substantially toward Western Europe with only small gaps remaining.

Panel A of Figure 2 shows the development of the Economic Freedom index of the Heritage Foundation, which is the summary of four subscores that cover four areas: rule of law, government size, regulatory efficiency, and open markets. It ranges from 0 to 100, with higher scores indicating greater economic freedom. As the figure shows, economic freedom was still lower in the EU East than in the West

<sup>2</sup> We always make sure not to omit a large part of the group population by excluding countries. Specifically, we do not show any non-EU East graphs without Serbia, which accounts for roughly 40 percent of the population in the non-EU East group, nor any EU East graphs without Poland, which accounts for roughly 35 percent of the population in the EU East group. Our comparisons all focus on non-population-weighted country-group averages, but we have confirmed that population-weighted averages look largely similar.

*Figure 1*  
**GDP per Capita**  
*(logarithmic scale)*



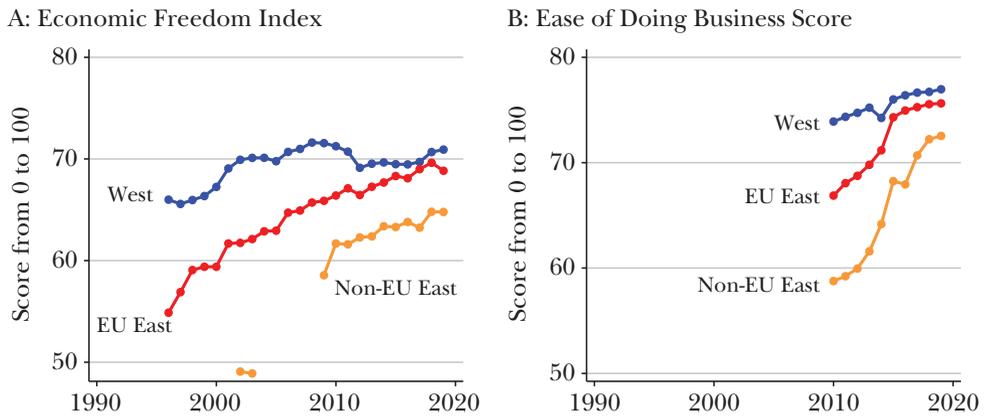
Source: World Bank.

Note: Kosovo and Montenegro are omitted from the non-EU East. The figure has a log scale and shows GDP per capita in constant international 2011 dollars, purchasing power parity adjusted.

in the mid-1990s. In the early 2000s, when data are available also for the non-EU East countries, the non-EU East has the lowest scores of the three groups. However, the East experienced a substantial catch-up in economic freedom over the entire time period, continuing up until the present. In 2019, the EU East exhibits average scores close to the West, and the gap between the non-EU East and the West has also closed considerably. A similar picture emerges from the Ease of Doing Business score provided by the World Bank, which summarizes information on the ease of starting a business, dealing with construction permits, getting electricity, getting credit, and so on, as shown in Panel B of Figure 2. Communist countries largely relied on state-owned enterprises and suppressed the formation of private businesses, so one would expect an initially low score of this summary index in the East after the fall of the Iron Curtain. The index is unfortunately available only from 2010 onwards, but shows initial large differences as well as substantial but incomplete convergence among the three country groups, similar to the index of the Heritage Foundation.<sup>3</sup>

<sup>3</sup>Only two of the 17 East countries have an Ease of Doing Business score lower than Greece—the country with the lowest score in the West. Only six East countries score lower than Italy—the country with the second-lowest score in the West. North Macedonia, the country with the highest score in the East, is surpassed only by the United Kingdom and Denmark in the West.

Figure 2

**Indices of Market Orientation**

Source: Panel A: Heritage Foundation (<https://www.heritage.org/index/>); panel B: World Bank.

Note: In the left panel, Kosovo is missing from the non-EU East; Montenegro and Serbia have missing values from 2004 to 2008, thus these years are omitted.

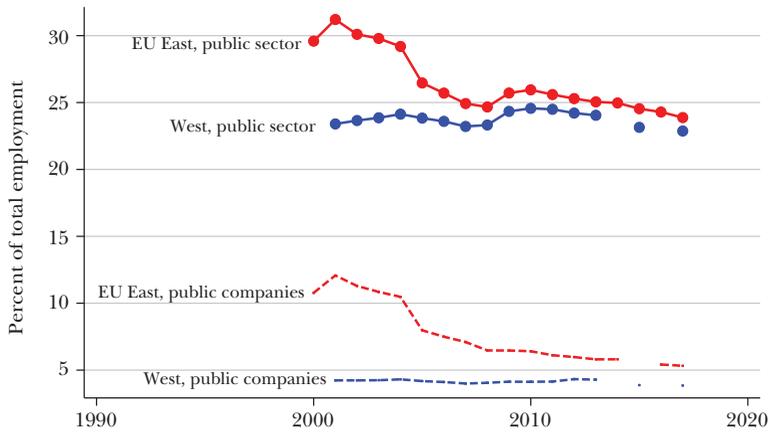
Strong government intervention into markets implies a large number of employees working in the public sector. Figure 3 shows the share of all employees working in the public sector as well as the share working specifically in public companies. The former adds the share of workers in general government to the latter. These data come from the International Labour Organization and are missing for the non-EU East. As Figure 3 shows, the share of workers in public companies and the share of workers in the public sector in total were both substantially higher in the East than in the West in the early 2000s but have been falling steadily in the East toward levels similar to the West. Thus, public employment shows convergence of East levels to the West, mimicking the ones of the indicators of economic freedom.

**Democratization**

Turning from the economic to the political sphere, we use scores from the Polity IV Project provided by the Center for Systemic Peace, which are a commonly used indicator for the quality of democratic institutions. This index ranges from  $-10$  to  $10$ , with  $-10$  representing hereditary monarchies and  $10$  consolidated democracies. It is based on different components measuring the quality of executive recruitment, the constraints on executive authority, and political competition. As Figure 4 shows, the EU West countries exhibit an average score above  $9.7$  throughout the last three decades. The initial score for the EU East in 1993 is below  $8$ , and for the non-EU East it is below  $2$ . By 2006, all three country groups exhibit average scores of  $8.8$  or above. Thus, according to these indicators, all three country groups feature fairly solid democratic institutions today.

Figure 3

**Public Sector Employment**

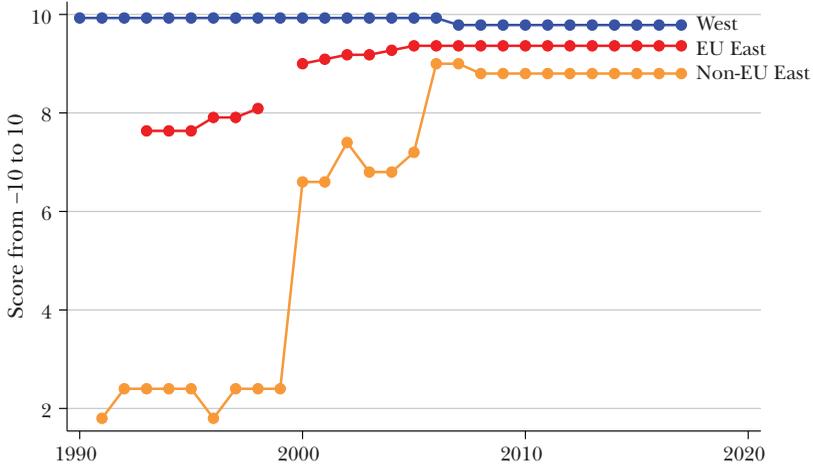


Source: International Labour Organization.

Note: Bulgaria, Croatia, Hungary, and Romania are missing from the EU East. The West comprises Denmark, Greece, Ireland, Luxembourg, Spain, Sweden, and the United Kingdom. Data for Austria, Belgium, France, the Netherlands, and Portugal are not available for the full time-series but line up well with the West average for the available years. Data for 2014 and 2016 are missing for Denmark as well as data on public company employment in 2015 for Latvia, thus these years are omitted from the West and EU East, respectively.

Figure 4

**Index of Democratization (Polity Score)**



Source: Center for Systemic Peace (<http://www.systemicpeace.org/polityproject.html>).

Note: Data on Bosnia and Herzegovina are missing. The Center for Systemic Peace provides an aggregate score for Yugoslavia from 1990 to 2002, which we assign to Kosovo, Serbia, and Montenegro. From 2003 to 2005, only a combined score is provided for Serbia and Montenegro, which we assign to both countries and Kosovo. From 2006, individual country scores are available for Serbia and Montenegro, and we assign the score for Serbia to Kosovo for 2006 and 2007. Data on North Macedonia are available throughout as well as data on Kosovo from its foundation in 2008 onwards. The value for Croatia in 1999 is missing, therefore we omit 1999 for the EU East.

### **Income Inequality and the Welfare State**

Equality in economic conditions is a stated goal of communism. The data suggest that pre-tax inequality was indeed lower in the East than in the West at the start of the transition but then increased rapidly. Moreover, government redistribution programs through taxes and transfers have not reached the scale in the East that they have in the West despite the increasing pre-tax inequality. As a result, in terms of post-tax inequality, the East seems to have roughly reached the West's levels. An important caveat for this topic is that measures of inequality are scarce. Future research using different measures to quantify inequality trends would be useful.

To document income inequality, we look at the pre-tax income share belonging to the top 10 percent income earners, using data from the World Inequality Database.<sup>4</sup> In 1990, the share of pre-tax income going to the top 10 percent was slightly above 27 percent in the West, but less than 23 percent in the EU East excluding Poland (for which data are only available as of 1992), and slightly above 23 percent in the non-EU East. However, the share of income of the top 10 percent earners in the EU East caught up with the West at levels of around 29 percent by the mid-2000s and rose to levels above 28 percent in the non-EU East by then.

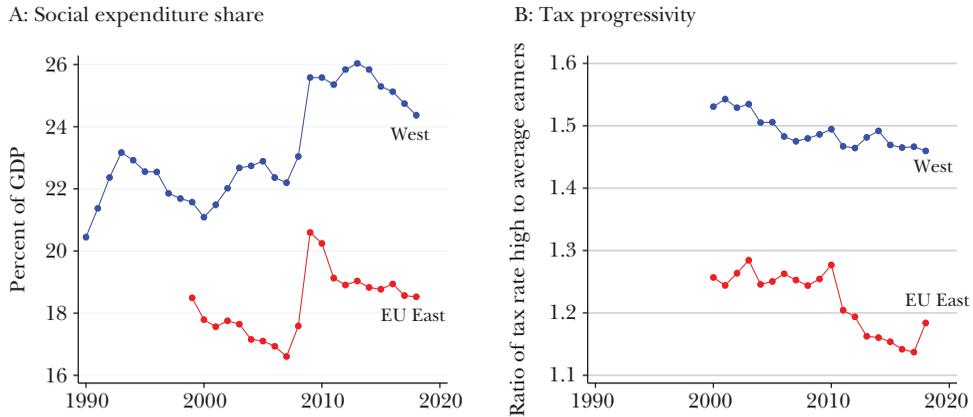
For net inequality, redistribution through taxes and transfers matters. Panel A of Figure 5 shows the average share of social expenditure relative to GDP, using OECD data. Unfortunately, these data are not available for the non-EU East countries. The EU East share always was and continues to be substantially below the share in the West.<sup>5</sup> Panel B of Figure 5 displays a measure of tax progressivity, namely, the ratio of the average income tax rate (combining central and local taxes) at 167 percent of average earnings to the tax rate at average earnings (for a single person without children). While information for the non-EU East is again not available, this ratio is substantially higher in the West than in the EU East, with the difference even increasing over time. A similar picture emerges if we calculate progressivity of the total tax wedge, which also includes social security contributions by both employees and employers.

It might seem somewhat surprising that redistribution through taxes and transfers is apparently lower in Eastern European countries than in Western ones, given the goal of equality under communism. This could, however, be the case because during communism, one important way in which equality was achieved was via direct wage and price regulation, generating less need for classical means of government redistribution in unregulated markets like progressive taxation and social transfer programs. Indeed, the only two countries with data from 1990—Poland and the Czech Republic—both exhibited a share of social expenditure to GDP of 14 percent

<sup>4</sup>The World Inequality Database is at <https://wid.world/>. Albania, Bosnia and Herzegovina, and Kosovo are missing from the non-EU East comparison.

<sup>5</sup>OECD data also show that the net replacement rate during unemployment was lower in the EU East (specifically in the Czech Republic, Hungary, Poland, and the Slovak Republic, which are the countries with available data) than in the West in the early 2000s, the earliest years with some information, only catching up in the late 2000s.

Figure 5  
**Measures of the Welfare State and Redistribution**



Source: OECD.

Note: Bulgaria, Croatia, and Romania are missing from the EU East in both panels. Panel B shows the ratio of the average income tax rate (combining central and local taxes) at 167 percent of average earnings to the tax rate at average earnings for a single person without children.

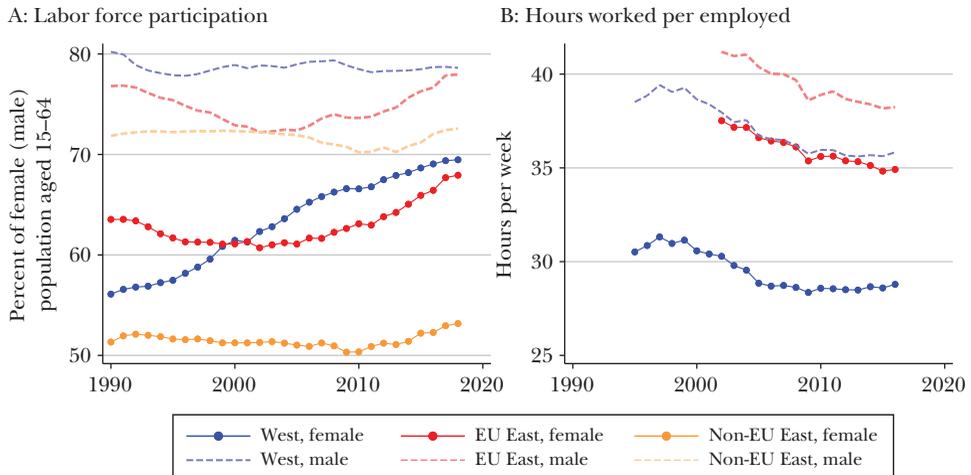
in that year, substantially lower than the current one. At the same time, corporate tax rates are also low in the East, and international tax competition might be another reason for low redistribution (for example, Cassette and Paty 2008).

The evidence of only slightly lower pre-tax inequality in the East, combined with less redistributive measures in the East, would suggest similar or even higher post-tax inequality in the East than in the West. The EU Statistics of Income and Living Conditions (EU-SILC) provide estimates of post-tax income inequality based on household surveys and can be used to analyze this issue. The EU-SILC start in 2004 with a limited set of Eastern European countries. Overall, the average Gini index of post-tax household disposable income in 2017 amounts to 30 in the West, 31 in the EU East, and 35 in Serbia and Macedonia (the only two non-EU East countries for which this statistic is available). Pensions play a significant role here: omitting pensions from disposable income, the Gini coefficient is lowest in the EU East with 34, followed by 36 in the West, and 39 in the non-EU East. Thus, disposable income inequality seems indeed to be at least at a similar level nowadays in the East and in the West, if not higher in the East.

### Gender Equality in the Labor Market

A high rate of female labor force participation is a specific and salient feature of communism. The participation of women, especially mothers, in the labor market was actively advocated during communism (Campa and Serafinelli 2019; Fuchs-Schündeln and Masella 2016). Panel A of Figure 6 shows the female labor force participation rate among the population aged 15–64. It was 8 percentage points higher in the EU East than in the West in 1990, while it was always lowest in the

Figure 6

**Labor Force Participation and Hours Worked per Employed by Gender**

Source: Panel A: The World Bank; Panel B: authors' calculations based on EU-LFS.

Note: Data refer to the population aged 15 to 64. Kosovo is missing from the non-EU East.

non-EU East. However, the female labor force participation rate in the EU East fell during the 1990s, while it rose in the West. This drop in female labor force participation in the EU East during the early transition years was plausibly driven at least partly by the labor demand rather than by the labor supply side: it is smaller than the corresponding drop in the male participation rate (depicted as a dotted line), which in fact fell by 4.6 percentage points (compared with 2.8 percentage points for women) and also reached its trough in 2002. Only toward the mid-2000s did the female labor force participation rate start increasing again in the EU East, and in 2010, it finally started increasing slightly in the non-EU East. Today, labor force participation of men in the EU East lies 0.7 percentage points below the West, while the gap for women is 1.5 percentage points.

The labor force participation rate alone gives an incomplete picture of the labor supply behavior because it blurs any distinction between part-time and full-time work. Throughout the last three decades, women in the EU East have been much less likely to work part-time than women in the West: the OECD reports an average female part-time employment rate of between 23 and 29 percent during the last decades in the West, but only 7 to 9 percent in the EU East (for the years 2002–2018). Based on the European Labor Force Survey (EU-LFS), we can calculate hours worked per employed woman aged 15 to 64, starting in 2002 for the EU East. While hours worked per employed woman have been falling in both the EU East and the West from 2002 onwards, the difference between both regions has been rather constant at seven more hours per week in the East than in the West. The corresponding difference for employed men is only three hours, as Panel B of Figure 6 shows. In this area, we do not observe any convergence between East

and West. As a result, total hours worked per woman aged 15 to 64, combining the employment rate and hours worked per employed woman, continue to be significantly higher in the East than in the West, with a difference of around 3.1 hours for the years 2002–2016 (see also Bick, Brüggemann, and Fuchs-Schündeln 2019; and Bick and Fuchs-Schündeln 2018 for further evidence on female employment, part-time work, and part-time regulation in Europe).

Our last measure of gender equality in the labor market is the gender pay gap. On average, male hourly wages in industry, construction, and services (excluding public administration and defense) are 14 percent higher than female ones in 2017. This gender pay gap is almost identical in the EU East and the West according to Eurostat data. However, we lack data for the early transition years, and the caveat applies that this is an unadjusted gender pay gap.

Thus, in the area of gender equality, the picture that different indicators offer is very mixed: the female labor force participation rate points toward not only convergence but even a reversal of East and West. The gender pay gap is nowadays the same in the East and the West, but hours worked per employed woman are constantly higher in the East than in the West.

## **The Long-Term Effects of Communism: Preferences**

Summarizing the findings so far, we observe substantial convergence of the East toward the West in terms of macro indicators. However, institutional changes in a democratic society can last only if they have broad public support. Thus, we now turn from macro indicators to measures of individual preferences. Did communism lead to differences between East and West in attitudes toward the market economy, political institutions, income inequality, and gender equality in the labor market? And do these potential differences still exist even 30 years after the end of communism? Have these attitudes converged as well? We document average differences in preferences between former communist countries and countries from Western Europe. These differences are in line with differences between the communist and capitalist doctrines, except in the case of gender equality in the labor market. However, they could be indicative of both an effect of communism or of preexisting structural or institutional differences between the country groups (due to differences in culture, precommunist history or institutions, or geography, as discussed by the companion paper by Becker, Mergele, and Woessmann). We therefore focus on cohort comparisons in which we exploit variation in exposure to communism across different cohorts within East and West countries. We use different datasets, as detailed below, and seek to use the most recently available data for each dataset.

Here, we rely on a nontechnical argument, using graphical analyses. In the online Appendix available with this paper at the *Journal of Economic Perspectives* website, we make our argument in a more rigorous form with a regression analysis. We show that the cohort-based results presented below hold up in a regression framework that includes all available years and countries of each dataset, adds

country-year fixed effects, and controls for individual-level characteristics, in particular, gender and current unemployment status.

### **Attitudes toward the Market Economy**

To study attitudes toward markets, we use data from the Life in Transition Surveys (LITS) 2010 and 2016, which were collected by the European Bank for Reconstruction and Development in collaboration with the World Bank. LITS cover all Eastern European countries and a few Western European comparison countries.<sup>6</sup> We add the 2010 survey round to the 2016 one to expand the set of Western comparison countries. The 2016 round covers only Greece and Italy while the 2010 round covers France, Italy, Sweden, and the United Kingdom.

Specifically, we use the LITS question, “With which one of the following statements do you agree most?” We code a variable, “support for market economy,” which is 1 if the respondent chooses “A market economy is preferable to any other form of economic system” and 0 if the respondent chooses “Under some circumstances, a planned economy may be preferable to a market economy” or “For people like me, it does not matter whether the economic system is organized as a market economy or as a planned economy.” We code this variable as missing if the respondent chooses “Don’t know.”

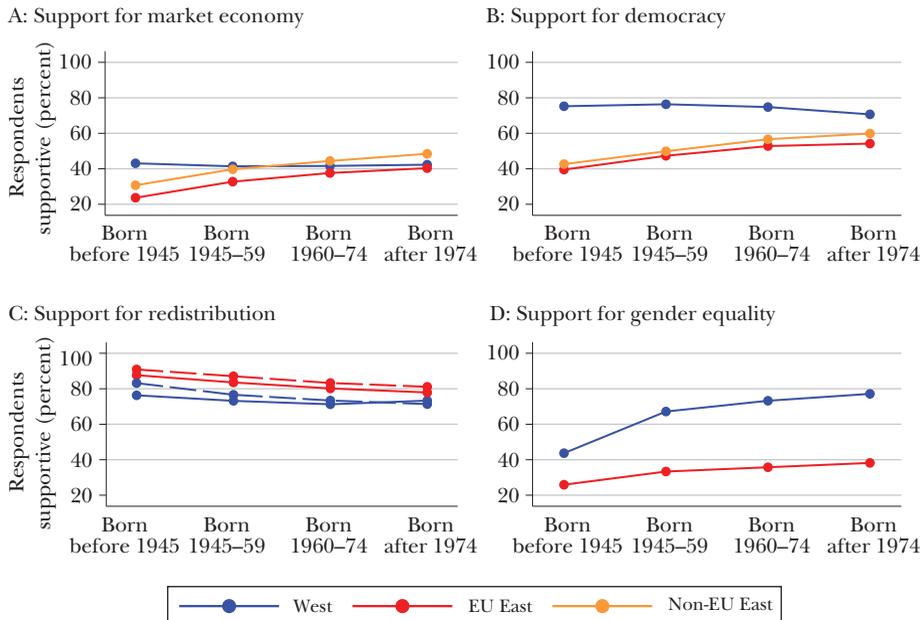
Panel A of Figure 7 shows the percentage share of respondents expressing preferences for the market economy. As before, EU East averages are shown in red, non-EU East averages in orange, and West averages in blue.<sup>7</sup> In contrast to the previous figures, the x-axis in Figure 7 does not depict a timeline, but rather, splits the sample of individual respondents into four cohort groups: those born before 1945, between 1945 and 1959, between 1960 and 1974, and 1975 and after.

In all three country groups, less than 50 percent of the population agree with the statement that a market economy is preferable to any other form of economic system. On average, respondents in the included West countries express somewhat higher preferences for a market economy than respondents in EU East countries, but very similar preferences to the ones of respondents in non-EU East countries. On the one hand, it is surprising that the support for the market economy is generally so low, given the high degree of market freedom in all three country groups. On the other hand, the similarity of the expressed average preferences in East and West is quite in line with the almost complete convergence in the indices on market freedom we document above. In results not presented here (but available in the online Appendix), considering trends in the average preferences over the years 2010 and 2016, we do not observe any convergence, but rather, stable differences between the EU East and the West, and their stable absence between the non-EU East and the West.

<sup>6</sup>More detail and access to the LITS data can be found here: <https://www.ebrd.com/what-we-do/economic-research-and-data/data/lits.html>.

<sup>7</sup>To calculate averages for these three groups, we use survey weights to construct country averages and then give each country the same weight like we do when building the macro averages.

Figure 7

**Cohort Preferences: Support for Market Economy, Democracy, Redistribution, and Gender Equality**

Source: Authors' calculations, based on the following data sources: Panels A and B: Life in Transition Surveys 2010 and 2016; Panel C: International Social Survey Programme, Social Inequality module from 2009 (solid line) and Role of Government module from 2016 (dashed line); Panel D: International Social Survey Programme, Family and Changing Gender Roles module from 2012. The set of countries covered by the data differs for each panel. Details are mentioned in the text.

Any East-West difference in preferences could have existed, however, before communism, rather than being an effect of living under different systems for up to 50 years. One way to get some insight into causality is to look at preferences of different cohorts. The central idea is that individuals may acquire preferences over time through experience. This endogeneity of preferences has been demonstrated for economic preferences by Alesina and Fuchs-Schündeln (2007) and Malmendier and Nagel (2011) and for political preferences by Fuchs-Schündeln and Schündeln (2015). Thus, if communism causally leads to differences in preferences, those who lived for a longer period under communism in a certain country will differ in their preferences from those who experienced communism for a shorter time. In particular, those who lived longer under communism will have preferences that are more aligned with the realities experienced under communism.

We therefore turn to differences across cohorts. Regarding support for the market economy, panel A of Figure 7 shows that there is almost no difference across cohorts in the West: 41 to 43 percent of the respondents are pro-market on average for all four cohort groups. On the other hand, in both EU and non-EU East

countries, there is a clear cohort gradient. The oldest cohorts (which have longer experience with communism) are much less pro-market than the younger cohorts (which have lived fewer years under communism). The difference between these two cohorts in both East country groups amounts to around 17 percentage points. This strong difference in preferences over cohorts is consistent with the hypothesis that communism causally leads to differences in preferences. Given that the youngest cohorts have preferences similar to the ones in the West, or even stronger preferences for a market economy in the non-EU East, these differences in attitudes, however, can be expected to vanish over time.

### **Attitudes toward Democracy**

In the area of support of the market economy, we observe an effect of communism on preferences expressed through a strong cohort gradient in East countries, but also similar preferences between East and West for the youngest cohort group. Do we observe similar facts for the support for democracy? For attitudes toward a democratic system, we use a LITS question similar to the one concerning attitudes toward the market economy. The question asks, “With which one of the following statements do you agree most?” We code the variable “support for democracy” as 1 if the respondent chooses “Democracy is preferable to any other form of political system.” The variable is coded 0 if the respondent chooses one of the two other options, namely “Under some circumstances, an authoritarian government may be preferable to a democratic one” or “For people like me, it does not matter whether a government is democratic or authoritarian.” If the respondent chooses “Don’t know,” the variable is coded as missing.

Differences in support for democracy are much more striking between East and West than differences in support for the market economy. As Panel B of Figure 7 shows, in the available West countries (France, Greece, Italy, Sweden, and the United Kingdom), on average 74 percent of the respondents agree with the statement that democracy is preferable to any other form of political system, while only 50 percent of the respondents in the EU East and 56 percent in the non-EU East agree with the statement. Therefore, despite the rapid convergence of the political systems, support for democracy is much weaker in the East than in the West. As is the case for support for the market economy, the support for democracy is higher in the non-EU East than in the EU East countries but remains substantially below the support in the West. The online Appendix provides an analysis of average preferences over time. There, we observe slight convergence of preferences between East and West from 2010 to 2016. The support for democracy of only 74 percent in the West may be surprisingly low. We note that it is in line with previous findings in the literature based on other data sources like the World Values Surveys (for example, see Foa and Mounk 2016).

The cohort patterns regarding support for democracy are very similar to the ones regarding support for the market economy and, again, indicate a lasting effect of communism. There is little variation across cohorts in the West, yet a fairly strong increase in support for democracy across cohorts in the East. The support for democracy in both EU East and non-EU East is 15 to 17 percentage points

lower among the oldest cohort group (born before 1945) than among the youngest cohort group (born in 1975 or later). Again, these results suggest a causal effect of communism on preferences for a specific (nondemocratic) political system, which still affects individuals up to 26 years after the end of communism. Moreover, even the youngest cohort groups, having lived at most 15 years under communism, show substantially lower support for democracy in the East than in the West. Therefore, unlike with preferences for the market economy, it is less clear that average differences between East and West will fade out over the coming decades.

### **Attitudes toward Inequality and Social Policies**

We documented a rapid increase in inequality in the East as well as less redistributive policies in the East than in the West. A desire to achieve equality is near the core of the communist ideology. Therefore, if preferences are affected by the system that individuals experience, and this effect is long-lasting, we expect that individuals in former communist countries prefer government policies that promote economic equality, which would be in contrast to the observed policies.

To study preferences related to inequality and social policies, we resort to data from the International Social Survey Programme (ISSP).<sup>8</sup> Two different ISSP modules include questions related to government policies regarding income inequality. The ISSP Social Inequality module from 2009, which we use as a baseline and show in solid lines in Panel C of Figure 7, covers all EU East countries but Romania, and all West countries but Greece, Ireland, Luxembourg, and the Netherlands. Unfortunately, ISSP does not cover any non-EU East countries. We use the question “To what extent do you agree or disagree with the statement, ‘It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes?’” Answer categories are “strongly agree,” “agree,” “neither agree nor disagree,” “disagree,” and “strongly disagree.” We code respondents as “pro redistribution” if they answer either “strongly agree” or “agree” to the question. An alternative measure comes from the ISSP Role of Government module from 2016, namely, the question, “On the whole, do you think it should or should not be the government’s responsibility to reduce income differences between the rich and the poor?” This module covers fewer countries and specifically leaves out Poland, the largest EU East country, as well as Bulgaria, Estonia, and Romania. Among the West, the module does not cover Austria, Greece, Ireland, Italy, Luxembourg, the Netherlands, and Portugal. Again, no data on non-EU East countries are available. Results based on this module are shown in dashed lines.

<sup>8</sup>The ISSP data are collected by a cross-national collaboration of academic organizations, universities, and survey agencies and have been available annually since 1985 with rotating topics. We use the modules “Social Inequality” from 2009, “Role of Government” from 2016, and “Family and Changing Gender Roles” from 2012. More detail and access to the ISSP data can be found at <http://issp.org>. We do not use LITS for this part of the analysis because the available LITS questions do not address general preferences but refer to actions related to the specific home country situation in a given year. Therefore, the answers are less comparable across countries. Relating to gender equality, LITS does not have questions comparable to the ISSP.

Panel C of Figure 7 first shows that across Europe, a large majority of respondents favor redistribution. Comparing East and West, the panel also shows that a larger share of Eastern Europeans are in favor of redistribution than Western Europeans. Relating to the baseline results from the Social Inequality module, on average, the difference between East and West amounts to 8 percentage points. This is in contrast to actual redistributive policies, which are weaker in the East than in the West. Thus, differences between East and West in policies and preferences do not line up in this area. We can also observe answers from the same module for the years 1992 and 1999, and there is no indication of convergence in preferences (as documented further in the online Appendix).

But is the high support for redistribution in the East an effect of communism, or are the East-West differences caused by other reasons? Again, we turn to cohort patterns in order to get an insight into causality. As in Panels A and B, Panel C shows in the baseline results almost no cohort pattern in support for redistribution in the West: around 73 percent of respondents of all cohort groups in the available Western European countries express support for redistribution. By contrast, there is a cohort pattern in the East: 88 percent of the oldest cohort group express their support for redistribution, but only 78 percent of the youngest cohort group. Again, the longer a cohort lived under communism, the more it sees redistribution as an important task of the government, in line with an effect of the communist doctrine on preferences of those who lived longer in a regime that followed this doctrine. For the youngest cohort group, we still observe East-West differences, but they are relatively small.

However, the differences between the cohort gradients in East and West are substantially smaller in the question relating to support for redistribution shown in Panel C than in the questions relating to support for the market economy or support for democracy shown in panels A and B. Also, in the answers to the alternative question from the Role of Government module (shown in dashed lines) the East and West cohort gradients are almost identical. Thus, the evidence regarding long-term effects of communism is weaker in this area than in the previous ones. One reason might be that generally support for redistribution is very high in both East and West.

### **Attitudes toward Gender Equality in the Labor Market**

Finally, we turn to attitudes toward gender equality in the labor market. Communist regimes actively promoted female labor force participation. Did this lead to persistently more favorable attitudes toward working women? We use data from the ISSP survey on the Family and Changing Gender Roles module from 2012 to investigate this. These data cover all EU East countries but Estonia and Romania, and all West countries but Greece, Italy, and Luxembourg.<sup>9</sup> The ISSP survey asks for agreement to the statement, “A man’s job is to earn money; a woman’s job is to look

<sup>9</sup>We additionally omit data from Spain, which features different answer categories in our relevant question than the rest of the countries.

after the home and family.” We code answers of “strongly disagree” or “disagree” as favoring gender equality.<sup>10</sup>

Results for the comparison of East versus West countries are displayed in Panel D of Figure 7. As this panel shows, individuals in the West have on average a substantially more positive attitude toward participation of women in the labor market than in the East. Of all four preference measures, this one shows the largest East-West difference, and it is the only one not showing average preferences in line with communism versus capitalism. On average, in the West around 70 percent of the population support gender equality in the labor market according to our measure, but in the East only 35 percent do. Looking at older data, support for gender equality was higher in the West than in the East back in 1994, and there has been little convergence of preferences between Eastern and Western Europeans for the years for which we have data available (1994, 2002, and 2012, presented in the online Appendix). These findings on preferences are in line with the rapid decrease in female labor force participation in the East in the 1990s, and the higher female labor force participation rate in the West than in the East nowadays. However, they are surprising in light of recent literature, which has established substantially higher female labor force participation and more positive attitudes toward working women in East than in West Germany, and has linked these causally to communism (Campa and Serafinelli 2019; Lippmann, Georgieff, and Senik forthcoming). Indeed, if we analyze the answers to the ISSP statement for Germany, we find higher support for gender equality in the East than in the West (as shown in the online Appendix).

One possible explanation for this divergence of results is that a comparison of averages does not, of course, establish causality. There are many differences between countries in the West and former communist countries in the East that may explain differences in attitudes, and communism is just one of these differences. For example, it could be the case that residents of Western countries have always been more favorable toward gender equality than residents from Eastern countries, and that such differences predate the establishment of communism. Religious differences might be one plausible preexisting factor that could generate differences regarding attitudes toward female labor force participation; in this context, it is intriguing that Djankov, Nikolova, and Zilinsky (2018) find that religious denomination matters in the context of happiness during transition. Research using an East-West comparison within Germany is a way to minimize some of these potential differences.

Here, we turn again to an analysis of cohort differences. In contrast to the other three panels in Figure 7, it is noteworthy that Panel D shows a strong cohort effect in the West when it comes to preferences for gender equality: almost 80 percent

<sup>10</sup>In the online Appendix, we also build an index of gender equality that combines the level of agreement of respondents with seven statements relating to gender equality in the labor market. In addition to the question we use here, these include statements such as “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work” or “Both the man and woman should contribute to the household income.” Our findings based on the index are very similar to the findings presented here.

of the youngest cohort group in the West express support for gender equality in our measure, but only 45 percent of the oldest cohort group. One might expect a cohort gradient in preferences toward gender equality, but the difference is very large. In fact, a cohort gradient is also present in the East, but it is much weaker there: the difference in preferences for gender equality is 12 percentage points between the oldest and youngest cohort in the East, but 33 percentage points in the West. This is in line with a lasting effect of communism on preferences toward gender equality: having lived under communism tilted the preferences of older Eastern Europeans toward a preference for gender equality, so the cohort gradient in the East is weaker than in the West. Thus, we conclude that despite the substantially lower average support toward working women in the East than in the West, communism might have had a lasting impact. The differences in average support could be due to preexisting preferences or fundamental differences in the labor market after the fall of the Iron Curtain.

In summary, the cohort analyses suggest a lasting causal impact of communism on support for the market economy, democracy, redistribution, and gender equality.<sup>11</sup>

## **Conclusion**

Communism implies strong government intervention in markets, severe limits on political freedom, and low inequality across incomes and genders. In this paper, we find a fairly rapid convergence of the East to the West for most variables related to these areas: indices for market freedom and the state of democracy, as well as measures of inequality. Today, the differences between East and West in these variables are small or even nonexistent. Regarding gender equality in the labor market, we find that female labor force participation in the EU East rapidly dropped to levels even below the West, although full-time work for those women who are in the labor force continues to be the norm in the East.

Turning from macro indicators to preferences, we show that differences in preferences between East and West on key economic and policy issues persist a quarter century after the end of communism. Older cohorts in the East, who have lived under communism for a longer time, show preferences more in line with communism than younger cohorts, compared with the same cohort gradient in the West. This holds true for support of the market economy and democracy, preferences for redistribution, and attitudes toward working women. While on average residents in the East express less support for democracy and a stronger desire for redistribution, their preferences for the market economy are on average similar to the ones in the West, and their support of female labor force participation is even lower. The

<sup>11</sup> Again, the online Appendix confirms these findings in a more rigorous way in a regression framework.

latter result could potentially be explained by preexisting differences in preferences between the East and the West.

Thus, we find evidence for long-lasting effects of communism on preferences, despite the fairly rapid adjustment of institutions. This could be one explanation for the comparatively low happiness in the former communist countries despite their economic advancement. Guriev and Zhuravskaya (2009) show that life satisfaction in Eastern European countries is significantly lower than in comparison countries of a similar economic development, with larger differences for older cohorts.<sup>12</sup> The disconnect between preferences and (macro) developments could also contribute to an explanation of political setbacks in countries of Eastern Europe. If individuals in these countries on average prefer large-scale measures of redistribution, yet the actual economic system is not in line with those preferences, people might cast votes for more extreme parties. The fact that support for democracy in Eastern Europe is lagging behind Western European countries may further help explain the support for strong leaders in some Eastern European countries. The long-term effect of communism on preferences could thus still undermine the support for the new institutions.

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<sup>12</sup>While Guriev and Melnikov (2018) conclude that this happiness gap has closed in recent years, partly driven by an average increase in life satisfaction in former communist countries that is due to a change in the demographic composition, Djankov, Nikolova, and Zilinsky (2018) report a persistence of the happiness gap.

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