

Private Net Worth in Eastern and Western Germany Only Converging Slowly

By Markus M. Grabka

Very nearly 25 years after the fall of the Berlin Wall, households in eastern Germany have an average net worth of 67,400 euros which is less than half that of their counterparts in western Germany with an average net worth of 153,200 euros. In both parts of the country, real estate ownership is quantitatively the most important asset type. Although the share of owner-occupiers has increased significantly in both regions since 1990, only one-third of all households in eastern Germany are owner occupied whereas the corresponding share in the west is almost half. Further, the market value of the real estate owned in eastern Germany is only half of that in the west. There has, however, been a significant convergence both in terms of average living space and property furnishings since the fall of the Wall.

Aside from current income, the parameter of net worth represents a key resource in the economic activity of households. In addition, net worth has a specific function going far beyond the sheer fact of earning (for example, in the form of interest and dividends). It contributes significantly to stabilizing consumption in periods of income loss, while tangible assets can, as in the case of real estate, be used by the owner. A greater net worth may confer economic and political power, and be employed to achieve or maintain an individual's own high social status, or support the development of his or her children. In this way, personal assets also serve to reproduce and form elites. Finally, accumulating private wealth is an important instrument for old-age security and intergenerational transfers in the form of inheritance or gifts.¹

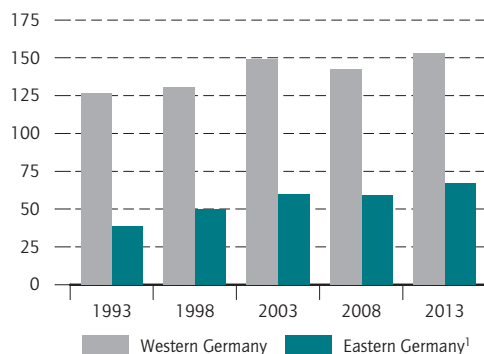
Analyzing the size and distribution of net worth separately in eastern and western Germany is not merely interesting in terms of regional differences but also reflects how far the repercussions of the fundamentally different conditions governing wealth accumulation in the two halves of Germany before reunification still continue to resonate more than twenty years after the fall of the Wall. Under the socialist economic system in the former East Germany, citizens there did not have such favorable opportunities to accumulate net worth as in West Germany. For example, it was only possible to invest to a very limited extent in business capital, in other real estate (in particular apartment houses) or shares. Moreover, although under the Economic, Monetary and Social Union on July 1, 1990, wages and pensions were converted at the rate of 1 East German mark to 1 deutschmark, the conversion for individual savings and liabilities was two East German marks to one West German

¹ On this, see a general discussion of the role of wealth in J. R. Frick, M. M. Grabka, and R. Hauser, *Die Verteilung der Vermögen in Deutschland – Empirische Analysen für Personen und Haushalte*, (Berlin: 2010).

Figure 1

Average Net Worth of Households

In 1,000 euros



¹ Eastern Germany 2013 including Berlin (West).

Sources: H. Stein, *Anatomie der Vermögensverteilung – Ergebnisse der Einkommens- und Verbrauchsstichproben 1983-1998*, Berlin, 2004; Ammermüller et al. "Entwicklung und Verteilung"; Federal Statistical Office, "Wirtschaftsrechnungen. Einkommens- und Verbrauchsstichprobe. Geld und Immobilienvermögen sowie Schulden privater Haushalte," 15(2) (2014).

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Net worth in households in western Germany over twice as much as in eastern Germany.

deutschmark.² Since reunification, the labor market in eastern Germany has been marked by migration, a lower wage level compared to western Germany,³ and a higher risk of unemployment in general, all of which negatively impacts the accumulation of assets due to the lower and more irregular flow of income streams.

In this study, the net worth of households⁴ is described in the following by reference to data published in the German Federal Statistical Office's Income and Expenditure Survey (Einkommens- und Verbrauchsstichprobe, EVS), and supplemented by the findings of the Socio-Econom-

ic Panel (SOEP)⁵, a panel surveyed conducted by TNS Infratest Sozialforschung (see box).⁶

Creeping Convergence of Net Worth in Eastern and Western Germany

In 1993, expressed as a mean, the average net worth of all households in western Germany amounted to 126,600 euros (see Figure 1). By 2003, this figure had risen to 148,800 euros, though in the wake of the financial market crisis it fell to 142,700 euros in 2008. By 2013, a new increase was observed with the figure rising to 153,200 euros. In general, the figures for net worth in eastern Germany are significantly lower. In 1993, households in eastern Germany had a net worth of just 38,400 euros, representing only 30 percent of the comparative figure for western Germany. In the period up to 2013, net worth in eastern Germany grew significantly by 75 percent to 67,400 euros yet, despite this increase, households in eastern Germany still only had assets amounting to 44 percent of households in the west.⁷ Hence, while net worth in western Germany has increased by around one-fifth since 1993, it has risen in eastern Germany by three-quarters. Nonetheless, even almost 25 years after German reunification, the long-term differences in wealth acquisition and asset growth in the post-war years determined by the conditions in both former German states still have a lasting impact on current inequalities in net worth in these two regions of present day Germany.

Real Estate and Property Quantitatively the Most Important Asset Type in Both Parts of Germany

Separate detailed information on the asset portfolio of households in eastern and western Germany is only available for the years 2003 to 2013 (see table). According to this data, real estate and property holdings form

² Savings differentiated by age could be directly converted 1:1 (2,000 East German marks per child up to 14 years old; 4,000 East German marks for people up to 59 years old, and 6,000 East German marks for those aged 60 and over).

³ See J. Ragnitz, "Regionale Lohnunterschiede in Deutschland," ifo Dresden berichtet, no. 2 (2012): 26–32.

⁴ Hence, people living in institutional households such as student dormitories or retirement homes are not included.

⁵ The SOEP is a representative longitudinal study of households conducted every year since 1984 in western Germany and since 1990 in eastern Germany, see G. G. Wagner, J. Göbel, P. Krause, R. Pischner, and I. Sieber, "Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland – Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender)," ASTA Wirtschafts- und Sozialstatistisches Archiv, vol 2, no. 4, (2008): 301–328.

⁶ Analyses of the development of wealth inequality can be found in M. M. Grabka and C. Westermeier, "Persistently High Wealth Inequality in Germany," DIW Economic Bulletin, no. 6 (2014): 151–165.

⁷ This figure may well be reduced further if business assets, which are not included in the EVS, are taken into account, since in particular the proportion of small and medium-sized enterprises with the requisite business assets is significantly higher in western Germany than in eastern Germany. Here, the former socialist economic structure of East Germany continues to negatively impact household wealth over the long term.

Box

Measuring Net Worth in the Income and Expenditure Survey (EVS)

Since 1962/63, the EVS survey has been conducted in Germany every five years. Data on net worth in eastern Germany have been available since 1993. The last survey was conducted in 2013. The Income and Expenditure Survey includes the following asset components: owner-occupied and other real estate (including items such as undeveloped building land, holiday and weekend apartments), financial assets (bank accounts, savings or mortgage bonds, shares or investment certificates, life insurance or private pension insurance, building loan agreements), consumer loans, education and training loans, and mortgages. To obtain total net worth, the figure relevant in welfare economics, liabilities are deducted from the total gross worth. Business assets, which are especially sensitive in distribution, are not surveyed; also not surveyed are valuables such as gold bars, jewelry, antiques, or art objects, the value of household goods, as well as the value of vehicles. Moreover, this definition of net worth does not include the entitlements to various old-age security systems which are, in any case, difficult to ascertain (statutory pension insurance, occupational pension, pension plan from occupational groups).¹

Aside from not surveying important asset components, the EVS has other methodological weaknesses as well. For example, since the EVS is not a random sample, but a quota sample, the findings only have a limited representative value; this is evident, among other things, in the insufficient inclusion of people with migrant backgrounds. Using the EVS data, it is not possible to make statements on households with larger net

¹ On the relevance of entitlements from old-age pension schemes in analyzing the amount and distribution of individual wealth, see J. R. Frick and M. M. Grabka, "Old-Age Pension Entitlements Mitigate Inequality: But Concentration of Wealth Remains High," Weekly Report, no. 8 (DIW Berlin, 2010).

worth since the survey applies an "upper cut-off threshold"² excluding households with particularly high incomes. The correlation, however, is particularly strong between high incomes and high net worth. In addition, the EVS underestimates liabilities from consumer loans.³ Taking the Bundesbank statistics as a benchmark, the data capture rate for liabilities is under 30 percent which leads, all other things being equal, to overestimating net worth.

In comparing the net worth of households by region, it is worth noting that, in contrast to income analyses, no weighting of needs is applied. Instead, the information obtained on net worth is related to each household in its entirety, so that possible differences due to varied household sizes or compositions are not taken into account here.⁴ In addition, the data do not include any inflation adjustment.

² In the EVS survey in 2013, the upper cut-off threshold applied to households with a net monthly income of 18,000 euros.

³ See A. Ammermüller, A. M. Weber, and P. Westerheide, Die Entwicklung und Verteilung des Vermögens privater Haushalte unter besonderer Berücksichtigung des Produktivvermögens, Project Report to the Federal Ministry for Health and Social Security (Mannheim: 2005).

⁴ At the same time, since 1990 the average household size, in particular, has decreased more strongly in eastern Germany than in western Germany, from 2.39 persons to 1.88 in 2012 (figures based on the author's calculations with the SOEP). Moreover, in interpreting the results, one needs to bear in mind the imponderables in the process of gathering data on assets in surveys. In general, the data are based on the respondents' own estimates which can be distorted for a number of reasons. For example, knowledge of the current market value of a given asset may often be limited if it was inherited or acquired many years earlier. In contrast to regular income, assets such as stocks and securities may be extremely volatile, making it additionally difficult to assess their value. Moreover, aside from the general sensitivity of this topic, such factors also lead to more refusals to answer questions relevant to establishing levels of net worth.

the main asset component in both parts of the country. In 2013, this accounted for 85 percent of the net worth of all households in western Germany, while the corresponding figure in eastern Germany was only 73 percent. In contrast, gross financial assets (comprising savings, securities, building loan agreements, insurances, and so on) which represented a share of 50 percent in western Germany in 2013, are relatively more important in eastern Germany.⁸ In comparison, this asset

component only accounted for 36 percent of net worth in western Germany.

Liabilities from mortgages are equally significant in west and east, amounting in both cases to a share of 20 percent, while loans for education and training as well as consumer loans only play a minor role. Over the last ten years, gross debt in eastern Germany has slowly de-

⁸ The proportion of men in eastern Germany in the Riester pension savings scheme is higher than in western Germany; the figures for women taking part in the scheme in the two regions are almost identical. See J. Geyer,

"Riester-Rente: Rezept gegen Altersarmut?," DIW Wochenbericht, no. 47 (2011). However, the spread of the Riester scheme does not give any indication of how much wealth is saved in this form of old-age provision.

Table

Portfolio of Net Worth By Region

	Former West Germany ¹			Former East Germany and Berlin ¹		
	2003	2008	2013	2003	2008	2013
Relative share of asset components to net worth in percent						
Gross financial assets	32	39	36	42	53	50
Residual consumer loans	1	1	1	2	3	3
Residual education and training loans	-	0	0	-	1	1
Real estate and property assets	90	83	85	87	75	73
Residual debt on mortgages	20	21	20	27	24	20
Gross total worth	121	122	122	129	128	124
Total debt	21	22	22	29	28	24
Net total worth	100	100	100	100	100	100
Average value per household in euros						
Gross financial assets	43,500	52,000	51,100	23,200	28,700	30,900
Residual consumer loans	1,400	1,700	1,800	1,300	1,600	1,800
Residual education and training loans	-	300	500	-	300	500
Real estate and property assets	122,600	109,100	119,900	47,500	41,000	44,900
Residual debt on mortgages	27,800	27,100	28,200	14,700	13,200	12,300
Gross total worth	166,100	161,200	171,100	70,700	69,700	75,800
Total debt	29,200	29,100	30,500	16,000	15,200	14,600
Net total worth	136,900	132,000	140,600	54,700	54,600	61,200

¹ Prior to EVS 2013, West Berlin was classified as the former West Germany and East Berlin as eastern Germany.

Source: Einkommens- und Verbrauchsstichprobe (Income and Expenditure Survey EVS).

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In both eastern and western Germany, property ownership is quantitatively the most important asset component.

clined to meet the levels in western Germany; while this amounted to 29 percent of net worth in 2003, this figure fell to 24 percent in 2013, reaching a level comparable to the 22 percent in western Germany.

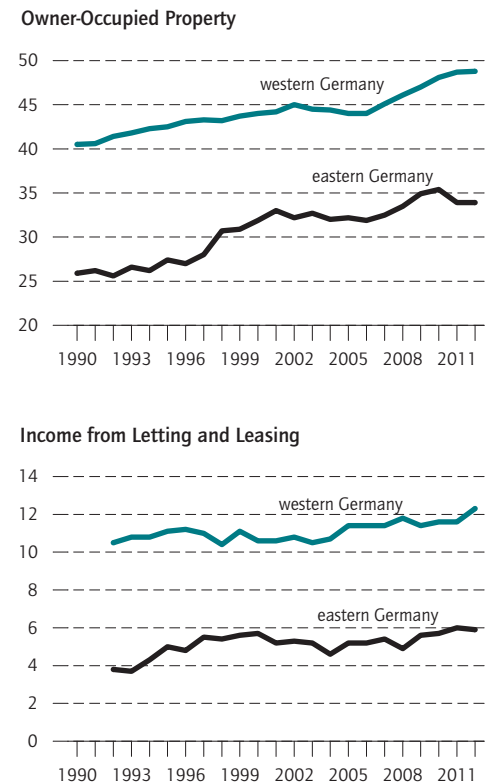
In relation to all households, the average amount of the various asset or debt components in eastern Germany is lower in each case than in western Germany. Hence, in 2013 households in eastern Germany only recorded gross financial assets of 30,900 euros, equivalent to just 60 percent of the corresponding net worth in western Germany. In contrast, both in west and east, consumer loans as well as loans for education and training, which are quantitatively insignificant, amount to less than 2,000 and 500 euros respectively.

The figures for the residual debt on mortgages reflect the different developments in eastern and western Germany. While residual mortgage debt has been decreasing in eastern Germany since 2003 and only amounted to 12,300 euros in 2013, these liabilities have shown a slight growth in western Germany since 2003 and presently amount to 28,200 euros.

Figure 2

Households in Owner-Occupied Property and Income from Letting and Leasing

In percent



Source: SOEPv29, households.

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Households in eastern Germany continue to be significantly less likely to live in owner-occupied property.

Quantitatively, real estate and property holdings are the most important component of net worth. However, with property assets in eastern Germany amounting to 44,900 euros, this still only represents 37 percent of the corresponding figure in western Germany (119,900 euros).

No Catch-Up Process in Owner-Occupied Residential Property

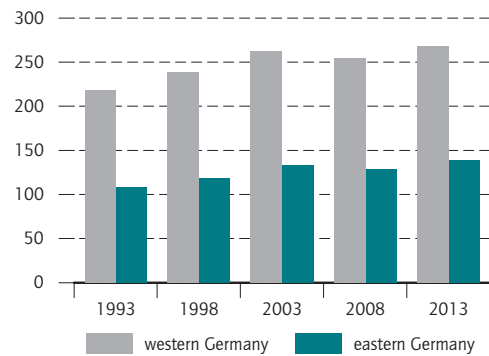
Given the particular quantitative importance of property ownership, the following examines this in more detail.⁹ Here, it is necessary to distinguish between own-

⁹ In addition to the quantitative factor, due to its utility function, real estate plays a particular role in old-age provision; after the repayment of the mortgage, if necessary, owners can live rent-free in their property in their old

Figure 3

Market Value of Real Estate and Property Holdings

In 1,000 euros



Sources: Federal Statistical Office, "Einkommens- und Verbrauchsstichprobe," 15(1) (2013) (special issue); *Wirtschaft und Statistik* 3 (1999): 210–220.

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Market value of real estate and property in eastern Germany only amounts to approximately 50 percent of that in western Germany.

er-occupied residential property (for example, an owner-occupied house or apartment) and other real estate and property (land, rented real estate, holiday homes, and so on.). In 1990, the proportion of households living in owner-occupied property in eastern Germany was significantly lower than in western Germany (see Figure 2). Only around one-quarter of all households in eastern Germany owned this form of asset, while over 40 percent of those in western Germany lived in owner-occupied property. Hence, both in the west and the east, the dominant residential form was tenant households.

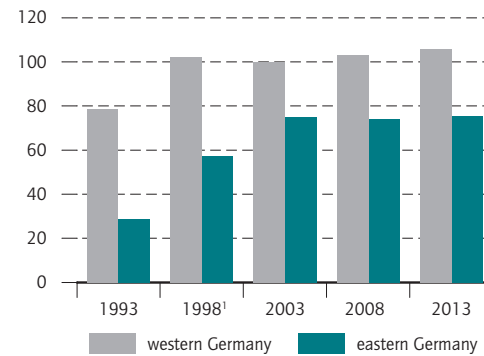
Although the percentage of owner-occupied property has significantly risen since then, the gap of 15 percentage points has not decreased. In 2013, nearly 50 percent of all western German households were now living in owner-occupied property. In eastern Germany, in contrast, this proportion only rose to around one-third. Moreover, over the past five years, the percentage of owner-occupiers in western Germany increased noticeably faster than in eastern Germany. These differences may well be traceable to the discontinuation of the scheme to provide state subsidies to those buying their own residential property (*Eigenheimzulage*), which was only in force up until

age and, in contrast to tenants, have a relevant income advantage on this, see J. R. Frick, M. M. Grabka, T. Smeeding, and P. Tsaklolu, "Distributional effects of imputed rents in five European countries," *Journal of Housing Economics*, vol. 19 (2010): 167–179.

Figure 4

Residual Debt on Mortgages

In 1,000 euros



¹ Figure estimated for western Germany.

Sources: Federal Statistical Office, "Einkommens- und Verbrauchsstichprobe," 15(1) (2013) (special issue); *Wirtschaft und Statistik* 3 (1999): 210–220.

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In eastern Germany, liabilities from mortgages have reached 70 percent of the value in western Germany.

December 31, 2005.¹⁰ Given the same level of subsidies, the significant differences in the price of building land in east and west meant that a family in eastern Germany was far more likely to create property assets through this scheme than a family in western Germany.

In comparison, a slight catch-up process is evident in households with other types of property ownership (see Figure 2).¹¹ In 1992, for example, 10 percent of all households in western Germany received income from other property, while this figure was less than four percent in eastern Germany. By 2012, this gap had been reduced to approximately half the western German level (12 to six percent).

There is also no catch-up process evident either from the figures for market value developments in residential real estate in eastern and western Germany (see Figure 3). In both regions, the nominal market value has risen by a good 25 percent over the past 20 years. In eastern Germany, market values continue to remain at close to half

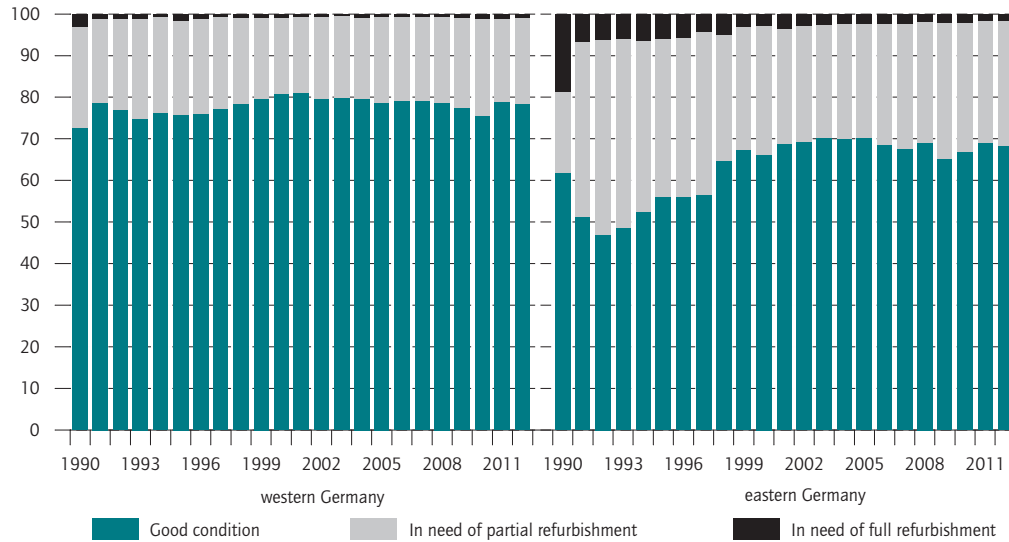
¹⁰ See the *Eigenheimzulagengesetz* (Law on Subsidies for Residential Property). Since 2006, there has no longer been a national program to promote owner-occupied property in Germany. Aside from state subsidy schemes, the key factors fuelling real estate demand also include the level of interest and related financing options, as well as the anticipated level of inflation.

¹¹ Here, these are approximated through the income households receive from other property. As a result, since not all property is let or leased and so produces income, the extent of other property ownership is underestimated.

Figure 5

Assessment of Refurbishment Need in Owner-Occupied Apartments/House-Owners Only

In percent



Source: SOEPv29, owner-occupied households.

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Apartment/house owner-occupiers in eastern Germany more frequently describe the condition of their properties as poor.

the levels in western Germany. Since real estate values also develop in relation to a region’s purchasing power, this can also be explained by continuing below-average income levels on the labor market in eastern Germany.¹²

The development in residual debt on mortgages for these real estate and property holdings shows a contrary trend (see Figure 4). While the value of these liabilities in western Germany since the late 1990s has shown little movement, remaining at approximately 100,000 euros, liabilities in the former East German Länder significantly increased up to 2003, and have presently reached more than 70 percent of the level in western Germany. Given the lower income levels in eastern Germany, households there have to take on relatively more debt to acquire residential property than their counterparts in the west. As a result, the net worth of property in eastern Germany continues to trail the comparative figure in western Germany.

¹² For example, one of the lowest prices for a used single-family house or duplex can be found in the district of Landkreis Mansfeld-Südharz at only 440 euros per square meter, while the equivalent price in Munich is 6,080 euros. The level of income in the former region is far below average, while the latter is numbered among those areas in Germany with the highest income levels. See J. Lembke, "Deutschland driftet auseinander," Frankfurter Allgemeine Zeitung, August 30, 2013, 28.

Condition of Property in East Still Worse than in the West

One factor to explain the lower market value of owner-occupied property in eastern Germany is the condition of the buildings (see Figure 5). In a survey of owner-occupied real estate in 2013, when owners were asked about the need to refurbish their properties, nearly 80 percent in western Germany replied that their property was in good condition, while less than 70 percent of property owners in eastern Germany gave the same response. Although there was a rapid process of improvements (and modernization) in owner-occupied residential property there in the 1990s, this catch-up process has ground to a halt since the start of the 2000s.

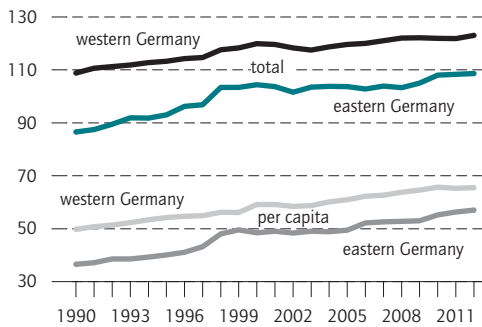
Convergence in Living Space and Furnishings

An ongoing catch-up process can still be observed in owner-occupied residential property. While in 1990, the average living space in eastern Germany of 87 square meters (sqm) was still over 20 sqm less than in western Germany, the most recent survey shows this gap decreasing to 14 sqm (see Figure 6). At the same time, over the last 25 years, the size of residential properties in both east and west has grown by over 10 percent. This growth

Figure 6

Living Space Per Apartment and Per Capita—Owner-Occupied Property Only

In square meters



Source: SOEPv29, owner-occupied households.

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Owner-occupied households in eastern Germany have significantly increased living space per capita since 1990.

is even more marked when living space is set in relation to the number of household members. Here, eastern Germany has made a major leap forwards. In the early 1990s, each owner-occupier had on average only 37 sqm of space available per person, compared to 50 sqm in western Germany. By 2012, the average living area in eastern Germany had risen by over 50 percent to 57 sqm per person (66 sqm per person in the west).¹³

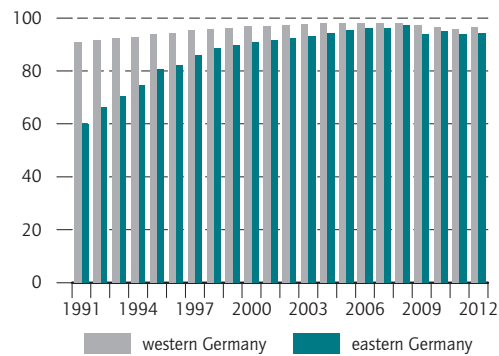
A substantial convergence process can also be noted in home furnishing (see Figure 7). Although eastern Germany had a significant modernization backlog, this was rapidly addressed and reduced. For example, while in the 1990s, over 90 percent of all owner-occupied residential properties in western Germany were fitted with central heating, the corresponding figure in eastern Germany was only two-thirds (moreover, frequently coal-powered central heating). From the mid-2000s, the provision of central heating systems in owner-occupied properties in both regions of Germany has been nearly the same, since almost every residential property now has this kind of heating. A similar convergence process can also be observed with regard to the provision of hot water and sanitary facilities with shower, bath, and WC in residential properties. Since the new millennium, both eastern and western Germany have virtually the same level of furnishings.

¹³ These findings are congruent with the decreasing size of households, especially in eastern Germany.

Figure 7

Owner-Occupied Households with Central Heating

In percent



Source: SOEPv29, owner-occupied households.

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Since the mid-2000s, it has hardly been possible to identify a difference between the two regions

Conclusion

Nearly 25 years after the fall of the Wall, there are still significant differences in average net worth between eastern and western Germany. The average household net worth of 67,400 euros in eastern Germany is less than half that in western Germany.

No catch-up process has been observed in the spread of owner-occupied property—which is quantitatively still the most important form of asset in Germany. While in western Germany almost every second household is in owner-occupied property, this figure has remained at only one-third for all eastern German households. However, not only is the distribution of owner-occupied real estate lower in eastern Germany, the average market value of these properties is also only approximately half that of western Germany. Here, one can cite as an explanation lower than average pay levels, the continuing high rates of unemployment, and demographic developments with a shrinking population in large parts of eastern Germany. The condition of the buildings in eastern Germany also remains slightly worse than those in the west. A clear catch-up process can be observed in average living space and home furnishings, with eastern Germany nearly closing the gap to western Germany here.

Given the overall lower wage and income levels, and higher unemployment, the opportunities for net worth

formation for the population in eastern Germany may well continue to be worse than for their counterparts in western Germany.¹⁴ In addition, inheritance and gifts form a significant factor in wealth formation.¹⁵ Irrespective of east-west migration, one can assume that the largest number of intergenerational transfers in the future cohort of those inheriting will take place within each of the regions analyzed here (east and west), and thus similarly play no significant part in reducing wealth differentials between them.

For wealth formation and old-age security, owner-occupied residential property has a particular significance. In an international comparison, the rate of owner-occupancy in Germany is very low. Germany is one of the few European countries without a national program to promote home ownership. If policy-makers planned to make property ownership more attractive, particularly for the half of the population on a low income, eastern Germany would profit more from state funding instruments due to the lower income levels there and this could then somewhat reduce the net worth differential that still exists 25 years after the fall of the Wall.

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14 See M. M. Grabka, J. Goebel, and J. Schupp, "Höhepunkt der Einkommensungleichheit in Deutschland überschritten?," DIW Wochenbericht, no. 43 (2012).

15 See J. R. Frick and M. M. Grabka, "Zur Entwicklung der Vermögensungleichheit in Deutschland," Berliner Journal für Soziologie, vol. 19, no.4 (2009): 577-600.

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