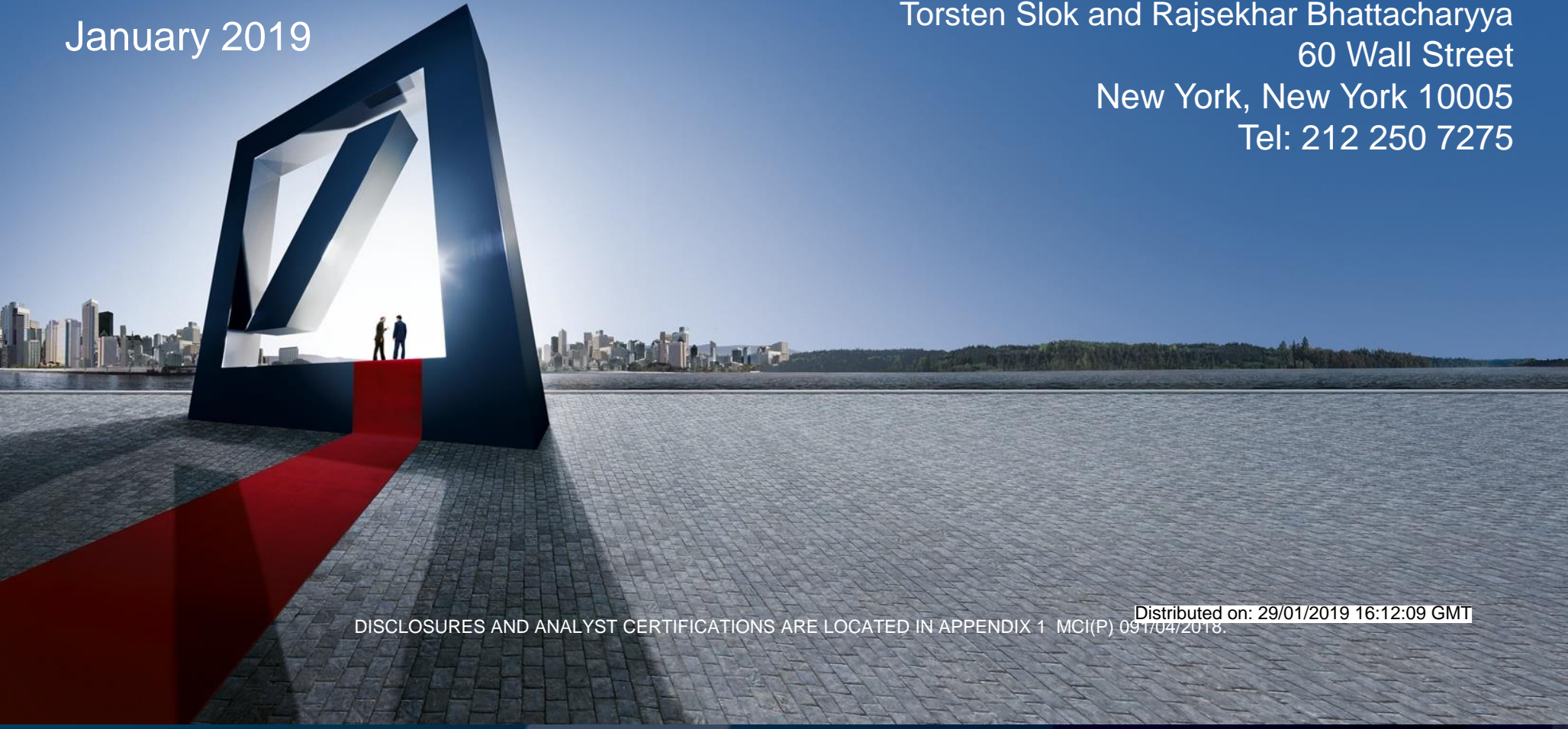




# Economic mobility in the United States

January 2019

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# Economic mobility: Overview



Economic mobility is the ability of individuals to move up or down the income distribution

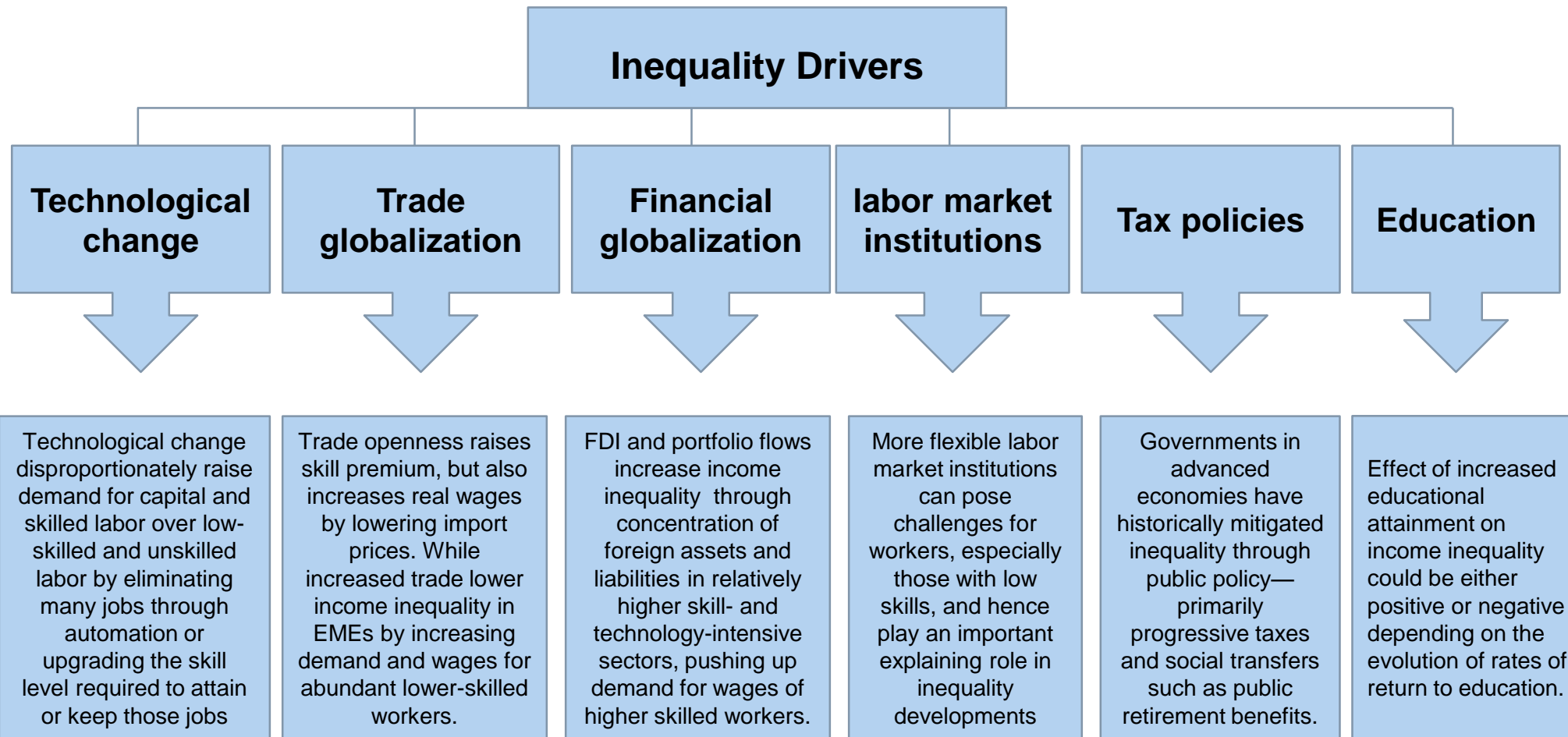
Several dimensions:

Inter-generational mobility (between parents and children)

Intra-generational mobility (inside each generation)

Cross-country comparisons

# Drivers of income inequality and economic mobility

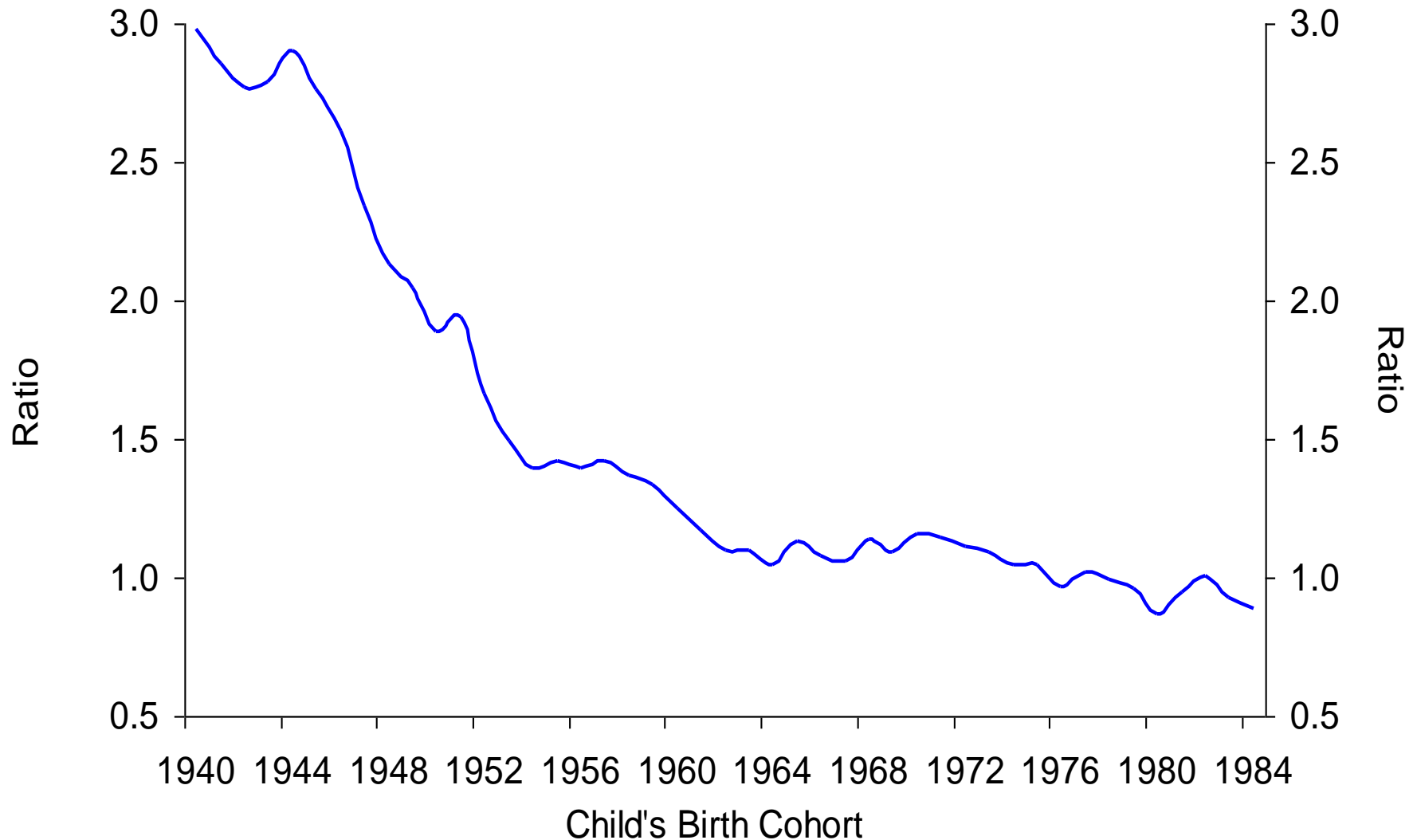


Source: OECD , DB Global Markets Research

# Steady decline in the share of children earning more money than their parents



## Median Ratio of Child's Income to Parents' Income by Birth Cohort

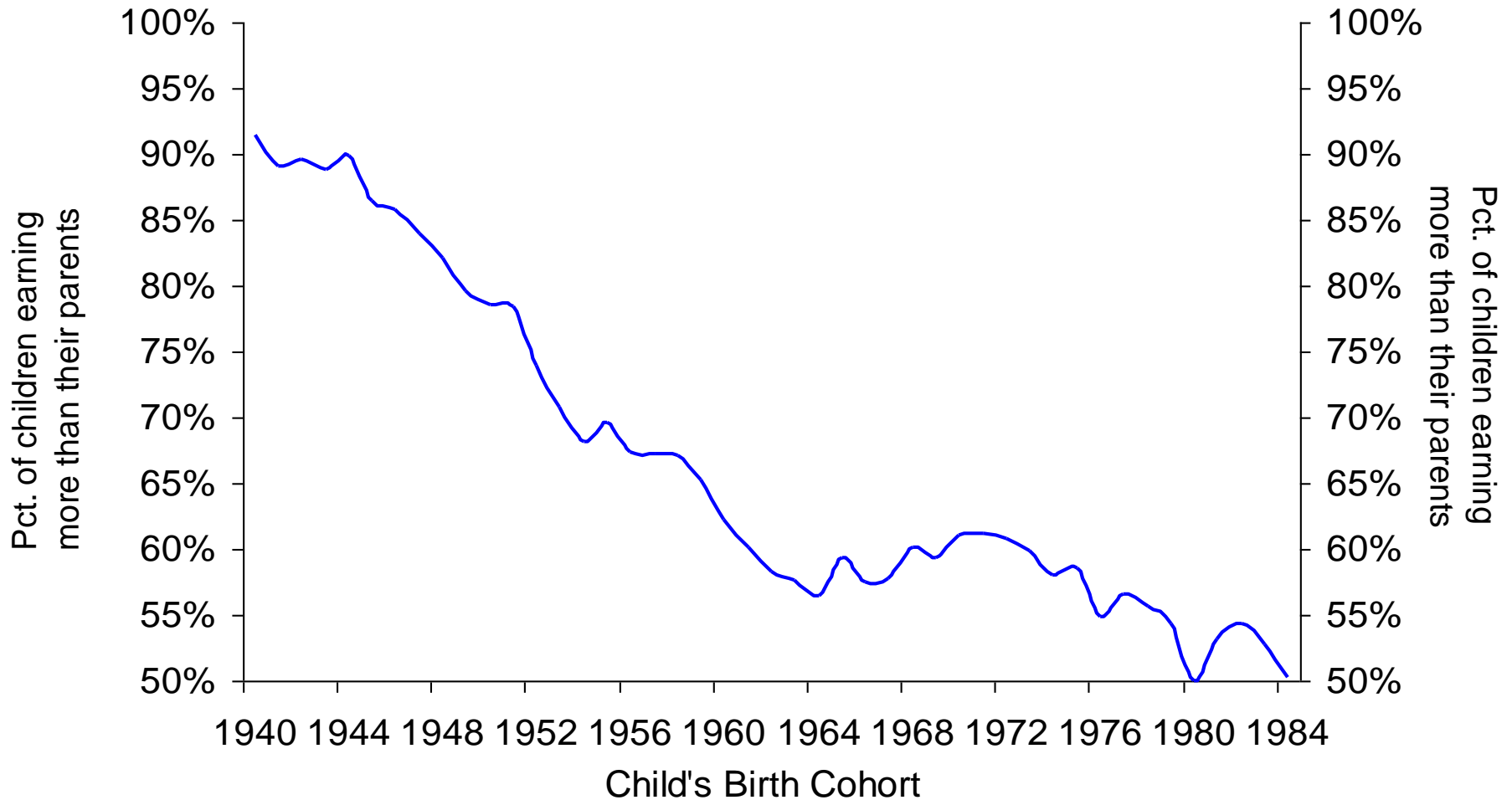


Source: Chetty et al., "The fading American dream: Trends in absolute income mobility since 1940", DB Global Research

# Steady decline in percentage of children earning more than their parents

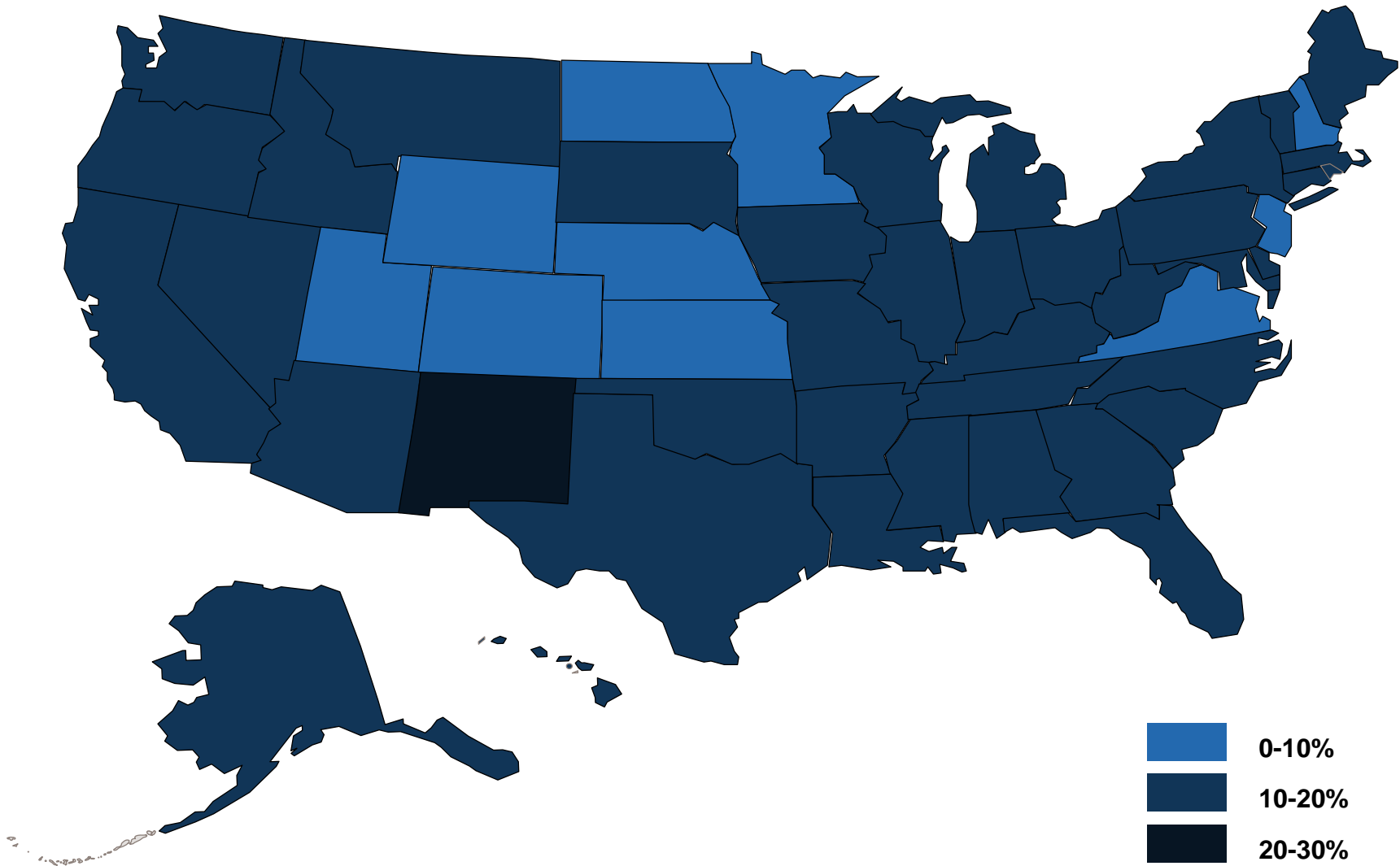


## Mean Rates of Absolute Mobility by Cohort



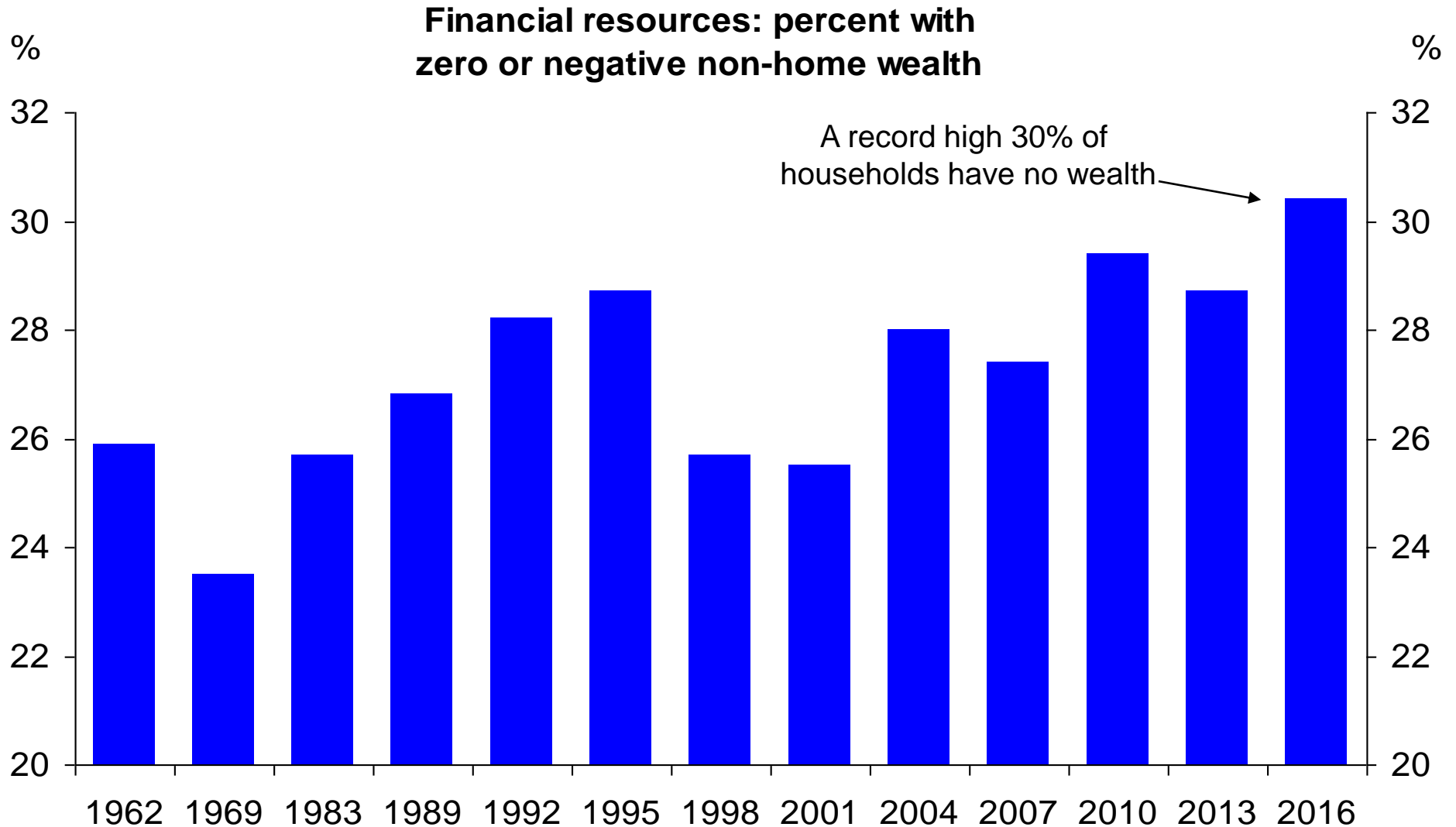
Source: Chetty et al., "The fading American dream: Trends in absolute income mobility since 1940", DB Global Research

# Percentage of population receiving food stamps, 2016



Source: CBPP, DB Global Markets Research

# More families than ever before have zero or negative non-home wealth



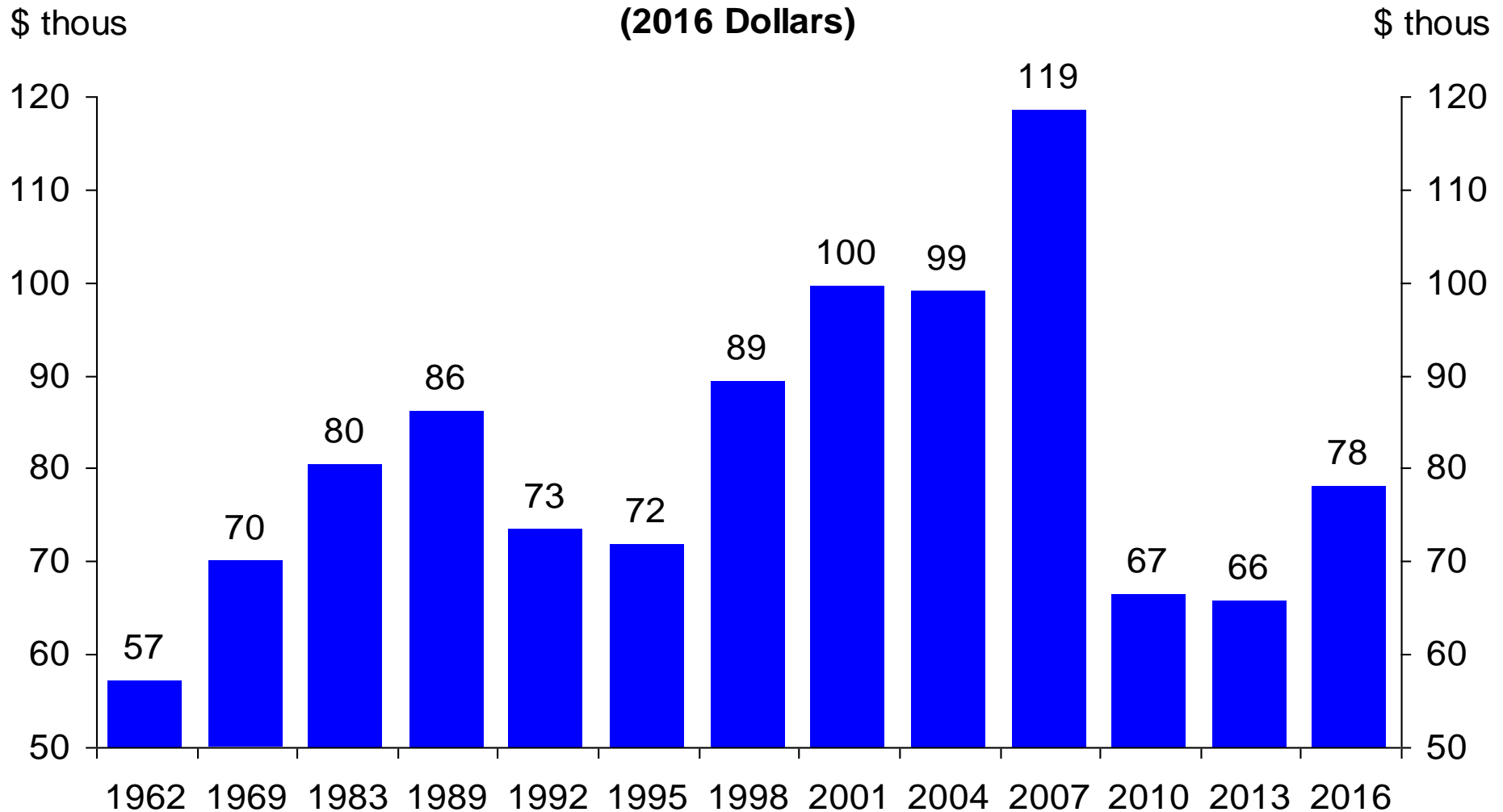
Source: Edward N. Wolff (2017). Survey of Consumer Finances, , DB Global Markets Research



# S&P500 and home prices may be at all-time highs but the median family still has low net worth

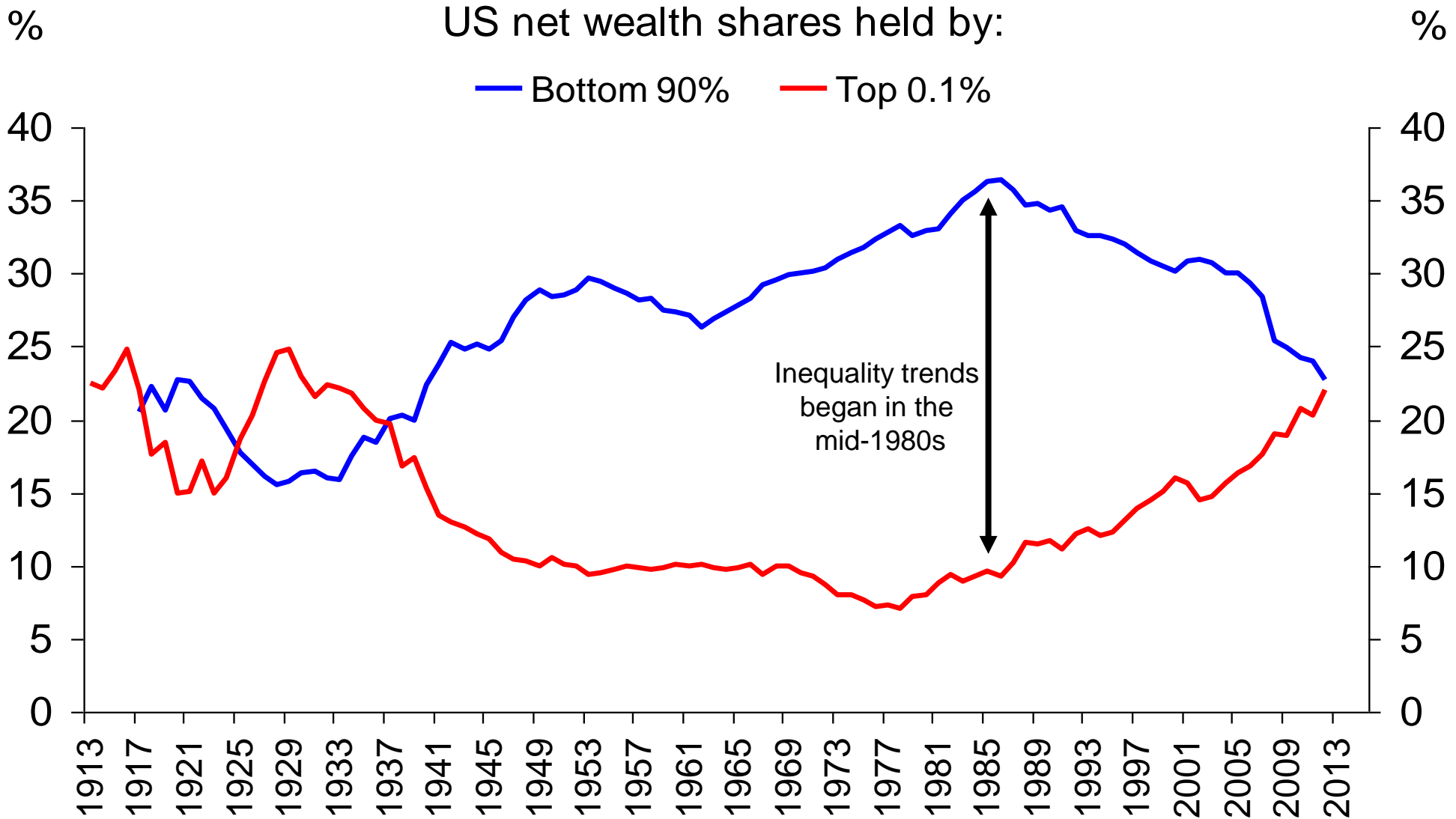


**Median net worth  
(2016 Dollars)**



Source: Edward N. Wolff (2017). Survey of Consumer Finances, DB Global Markets Research

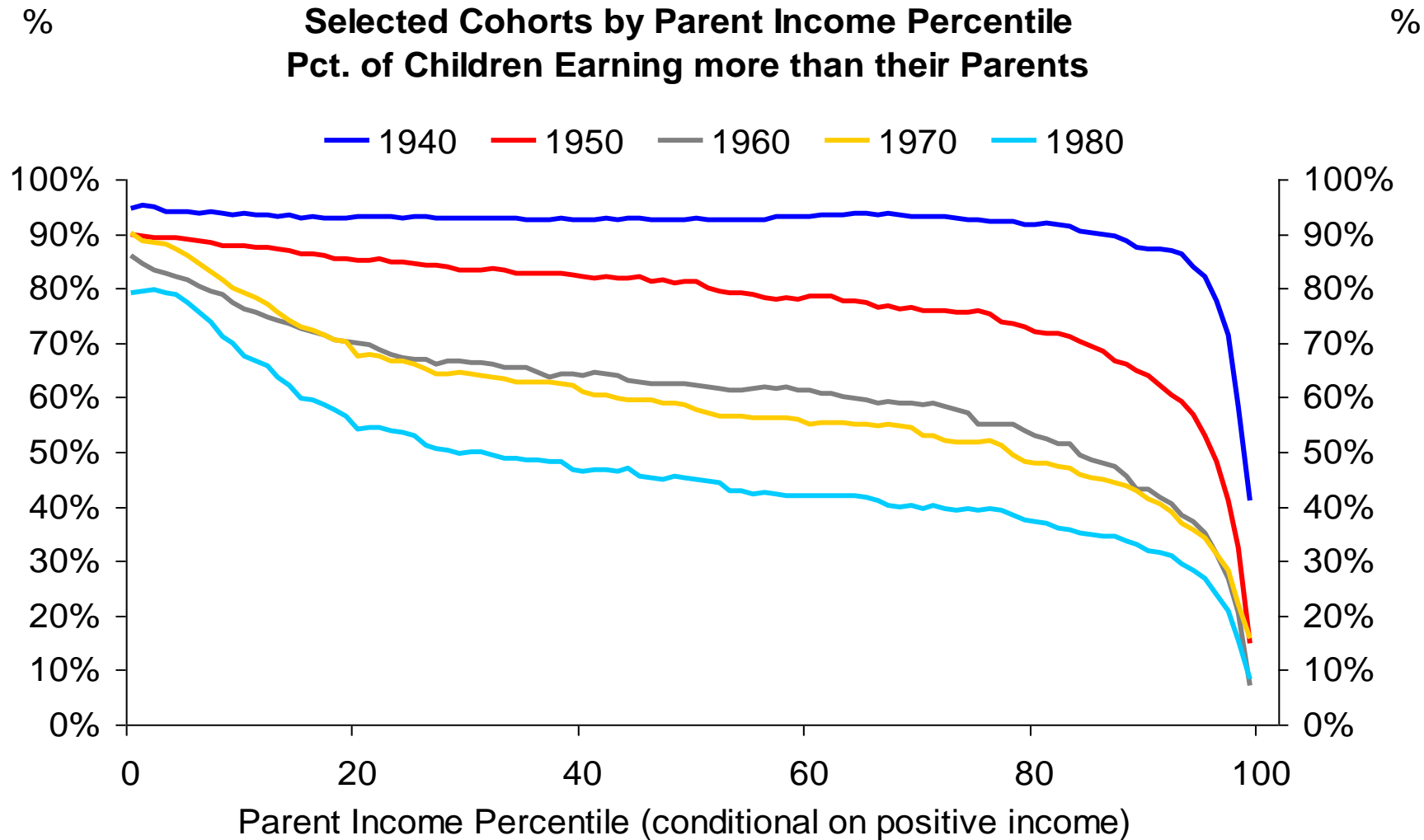
# US: Top 0.1% owns as many assets as the bottom 90%



Source: The World Wealth and Income Database, DB Global Markets Research



# Incomes of children born in the 1980s is lower relative to children born in 1940s and 1950s

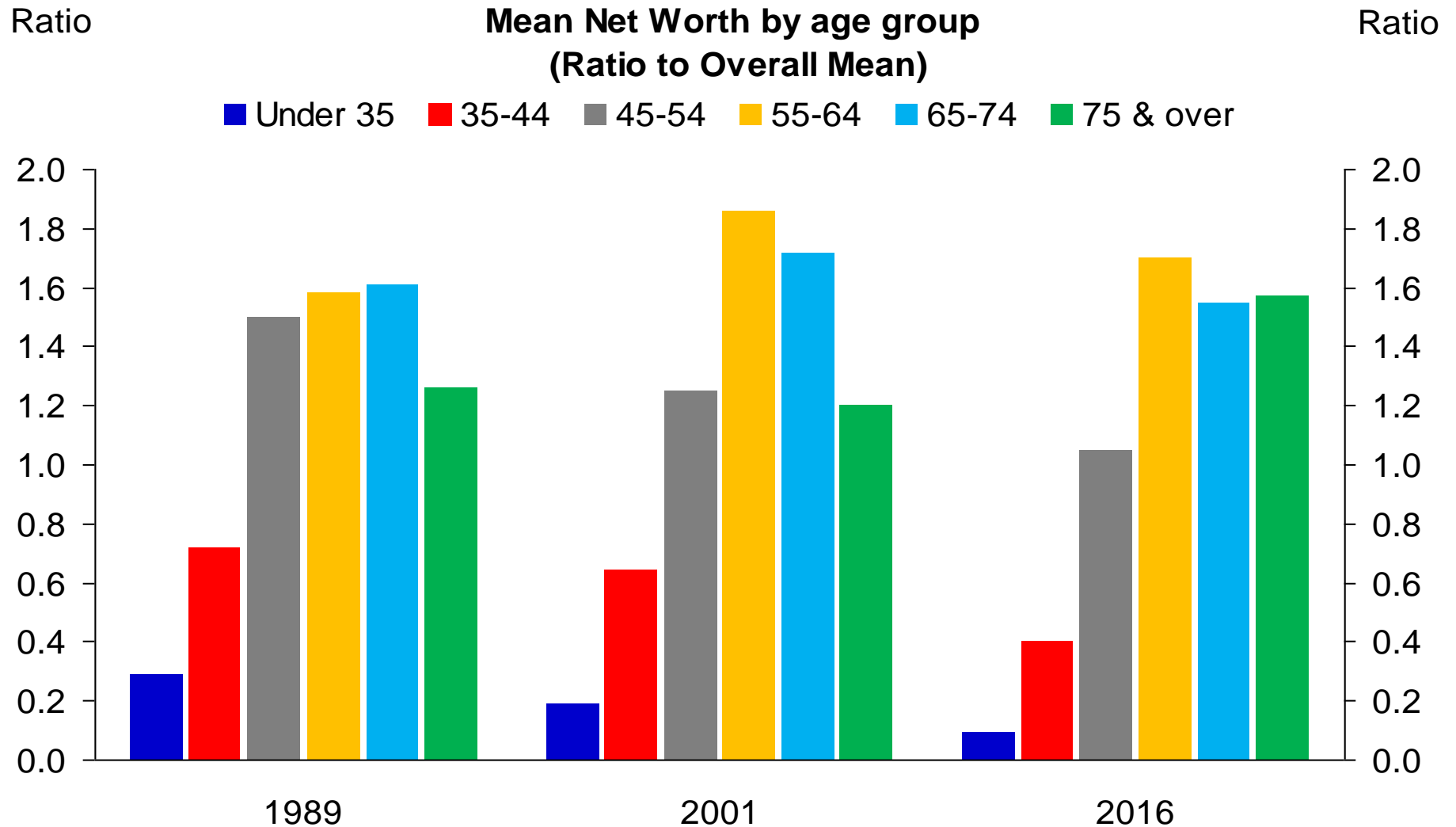


Notes: This figure plots the fraction of children earning more than their parents (“absolute mobility”) by parental income percentile for selected child birth cohorts

Source: Chetty et al., “The fading American dream: Trends in absolute income mobility since 1940”, DB Global Research

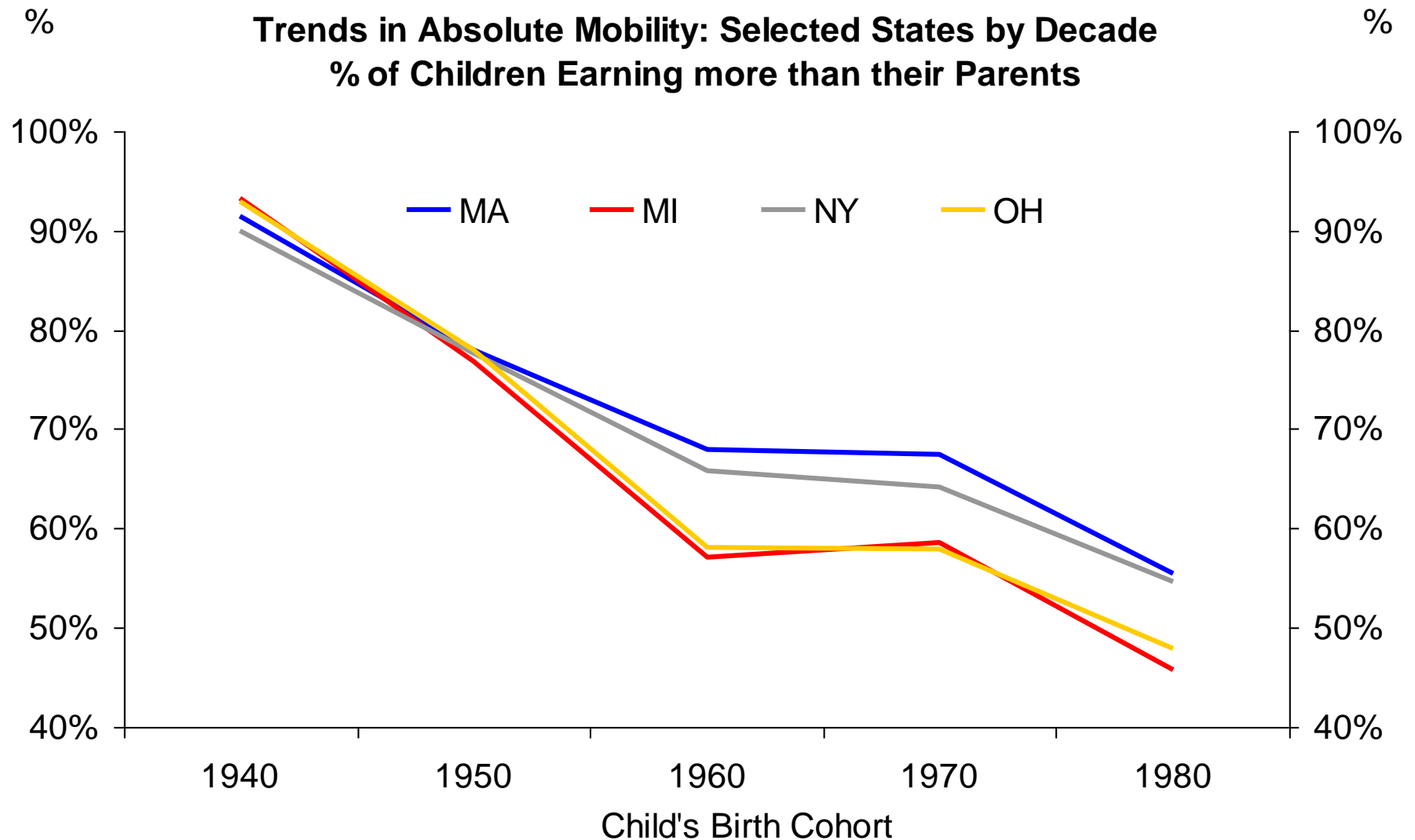


# Younger generations have smaller and smaller net worth



Source: Edward N. Wolff (2017) . Survey of Consumer Finances, DB Global Markets Research

# Economic mobility deteriorating more in Ohio and Michigan

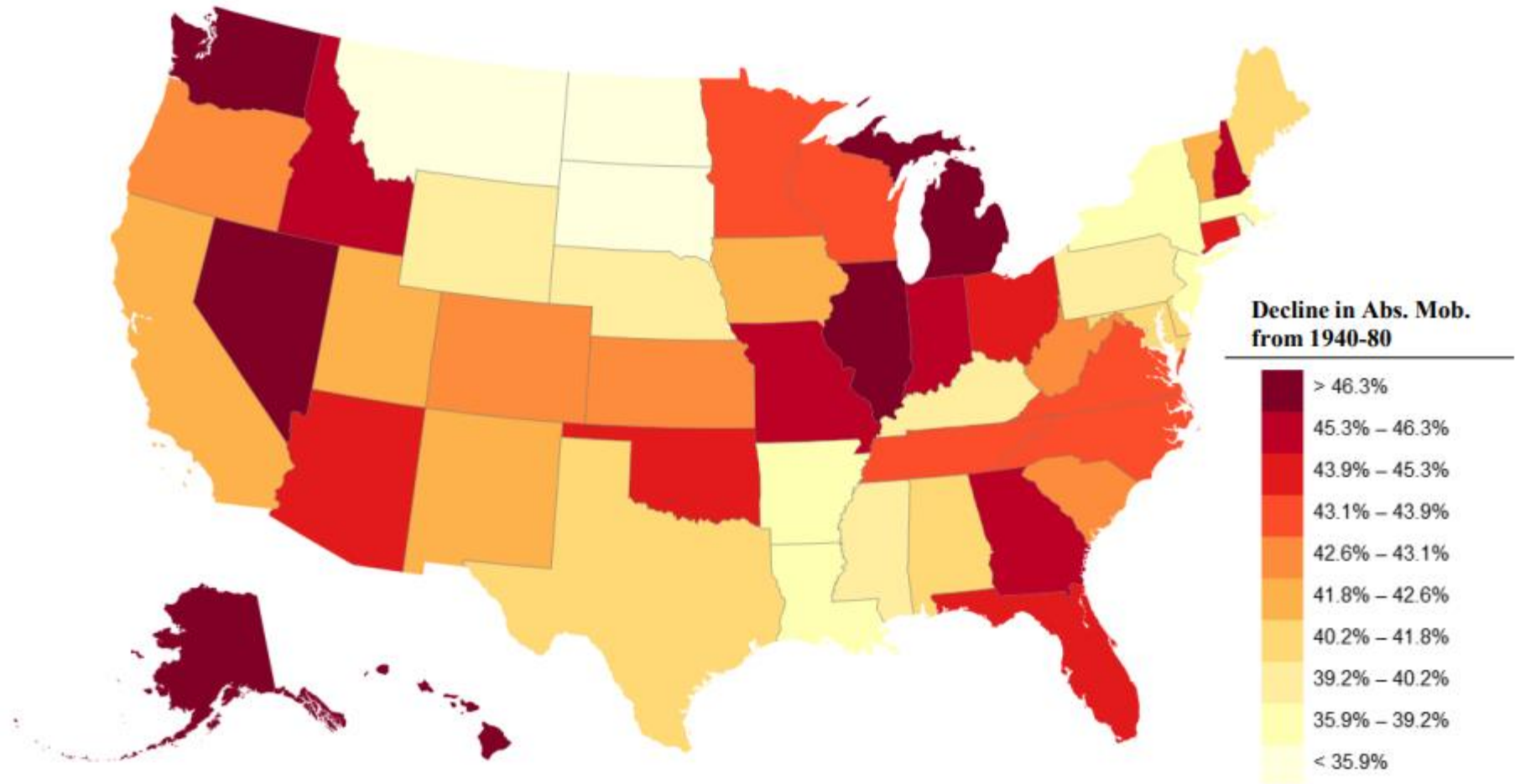


Notes: This figure plots the fraction of children earning more than their parents (“absolute mobility”) by parental income percentile for selected child birth cohorts

Source: Chetty et al., “The fading American dream: Trends in absolute income mobility since 1940”, DB Global Research



# Trends in absolute mobility by state: change from 1940-1980

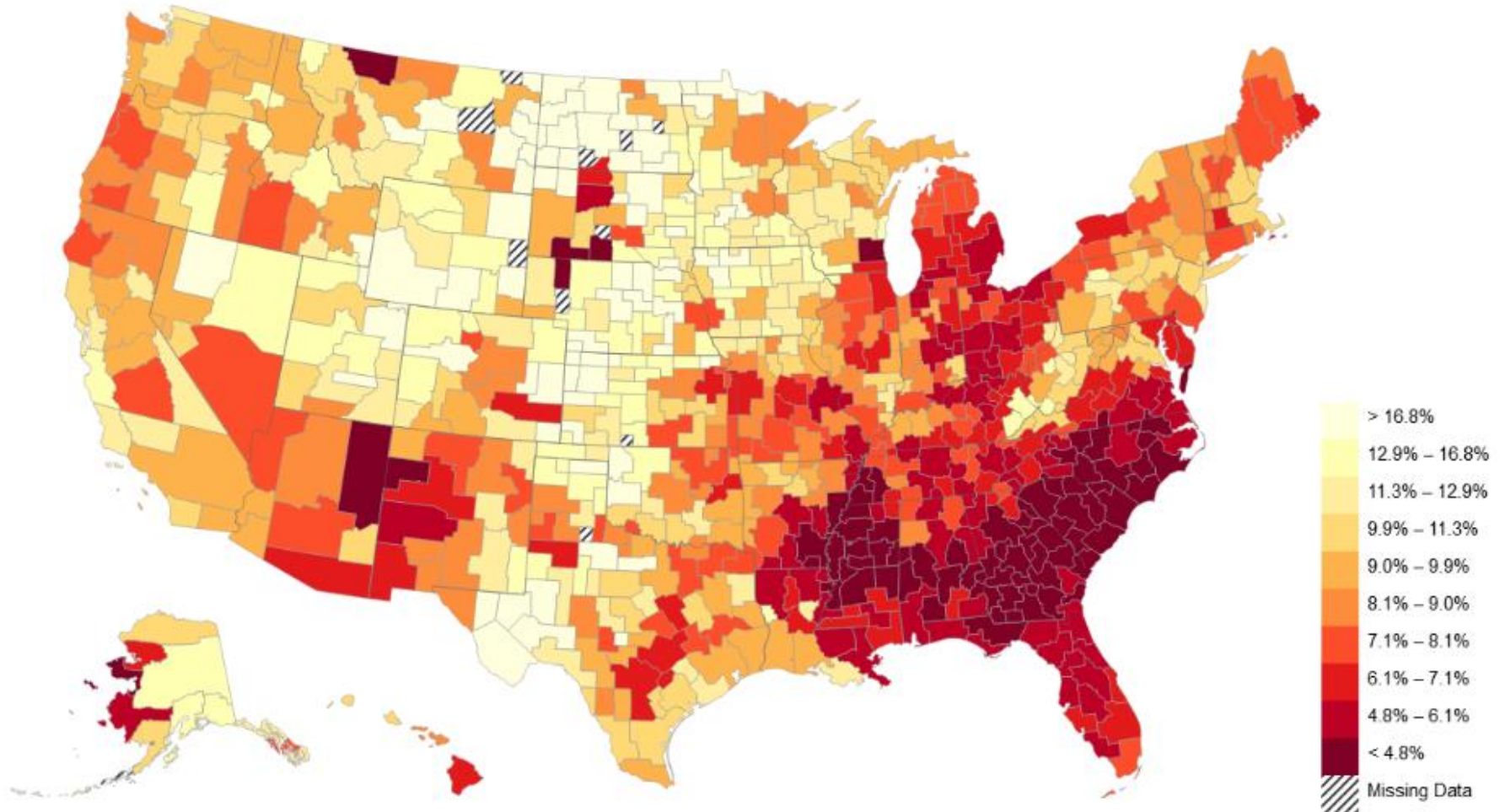


Source: Chetty et al., "The fading American dream: Trends in absolute income mobility since 1940", DB Global Research



# The Geography of upward mobility in United States

Children's chances of reaching top 20% of income distribution given parents in bottom 20%



*This map shows rates of upward mobility for children born in the 1980s for 741 metro and rural areas ("commuting zones"). Upward mobility is measured by the fraction of children who reach the top fifth of the national income distribution, conditional on having parents in the bottom fifth. Lighter colors represent areas with higher levels of upward mobility.*

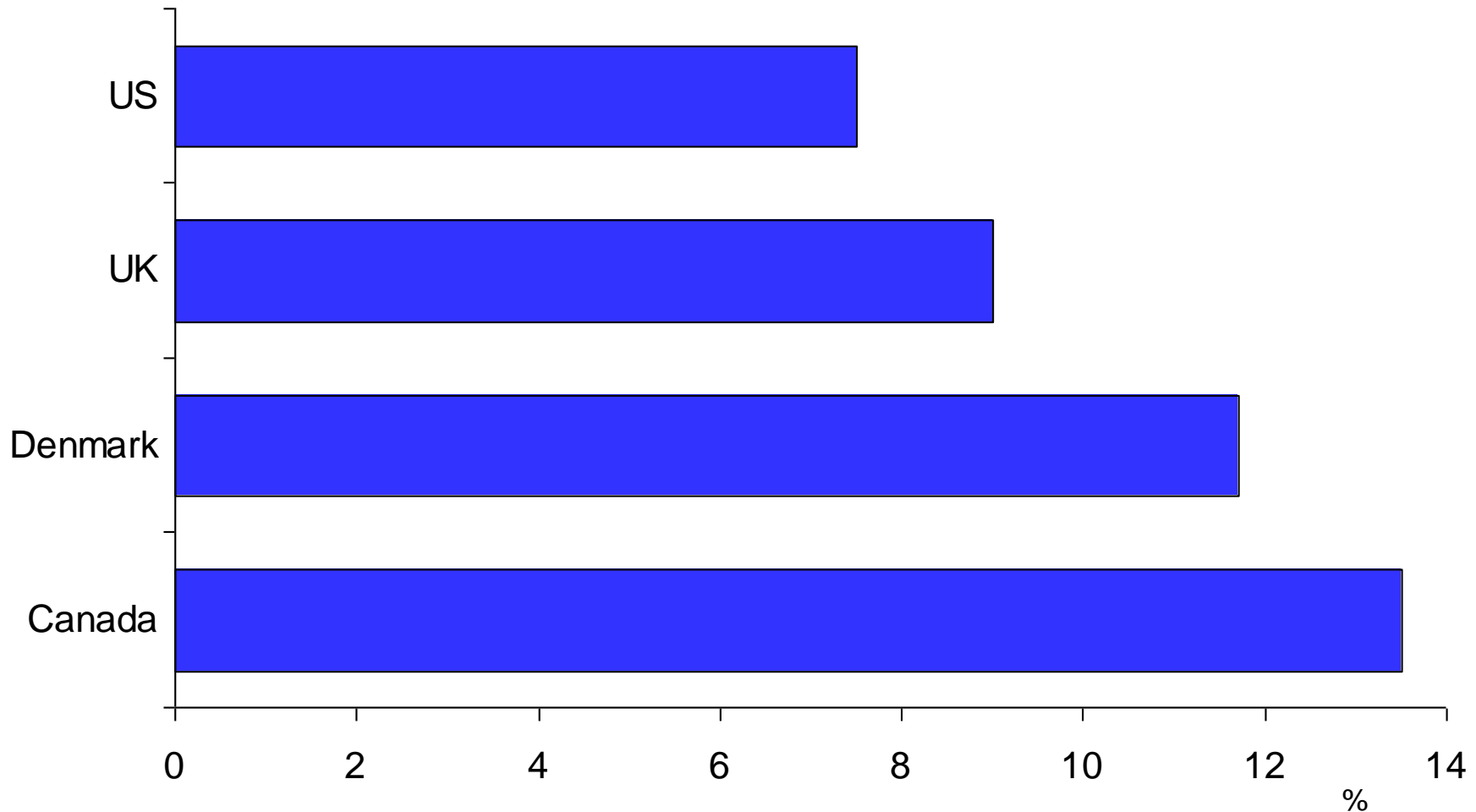
Source: Chetty et al., "The Equality of Opportunity Project", DB Global Research



# Relative mobility almost twice as high in Canada

## Relative mobility of United States with others

- Probability that a child born to parents in the bottom fifth of the income distribution reaches the top fifth



Source: Brookings, DB Global Research



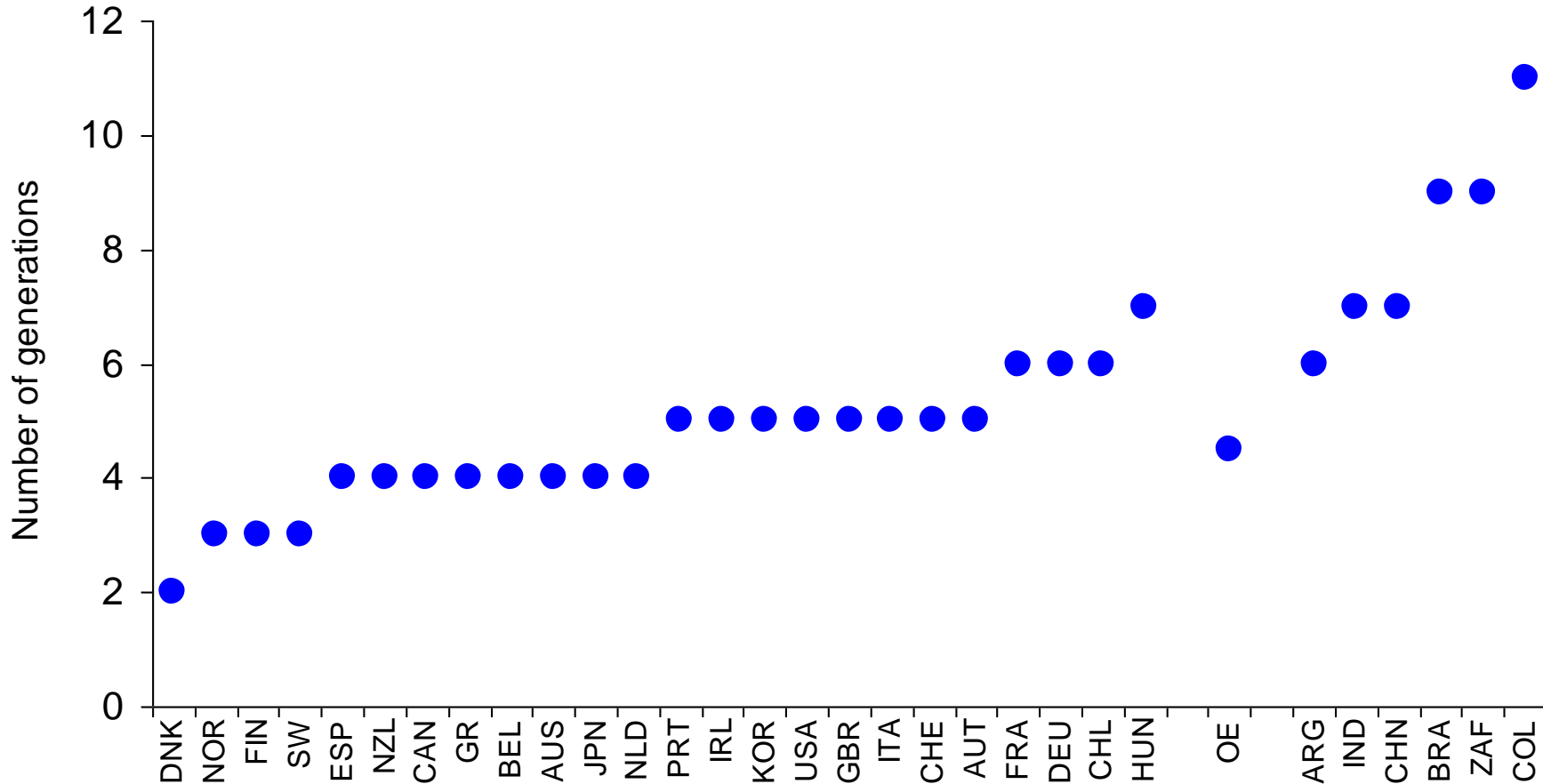


# Economic mobility: A cross-country perspective

# It takes on average 4 to 5 generations for the offspring of a low income family to reach the average income



**Expected number of generations it would take the offspring from a family at the bottom 10% to reach the mean income in society**



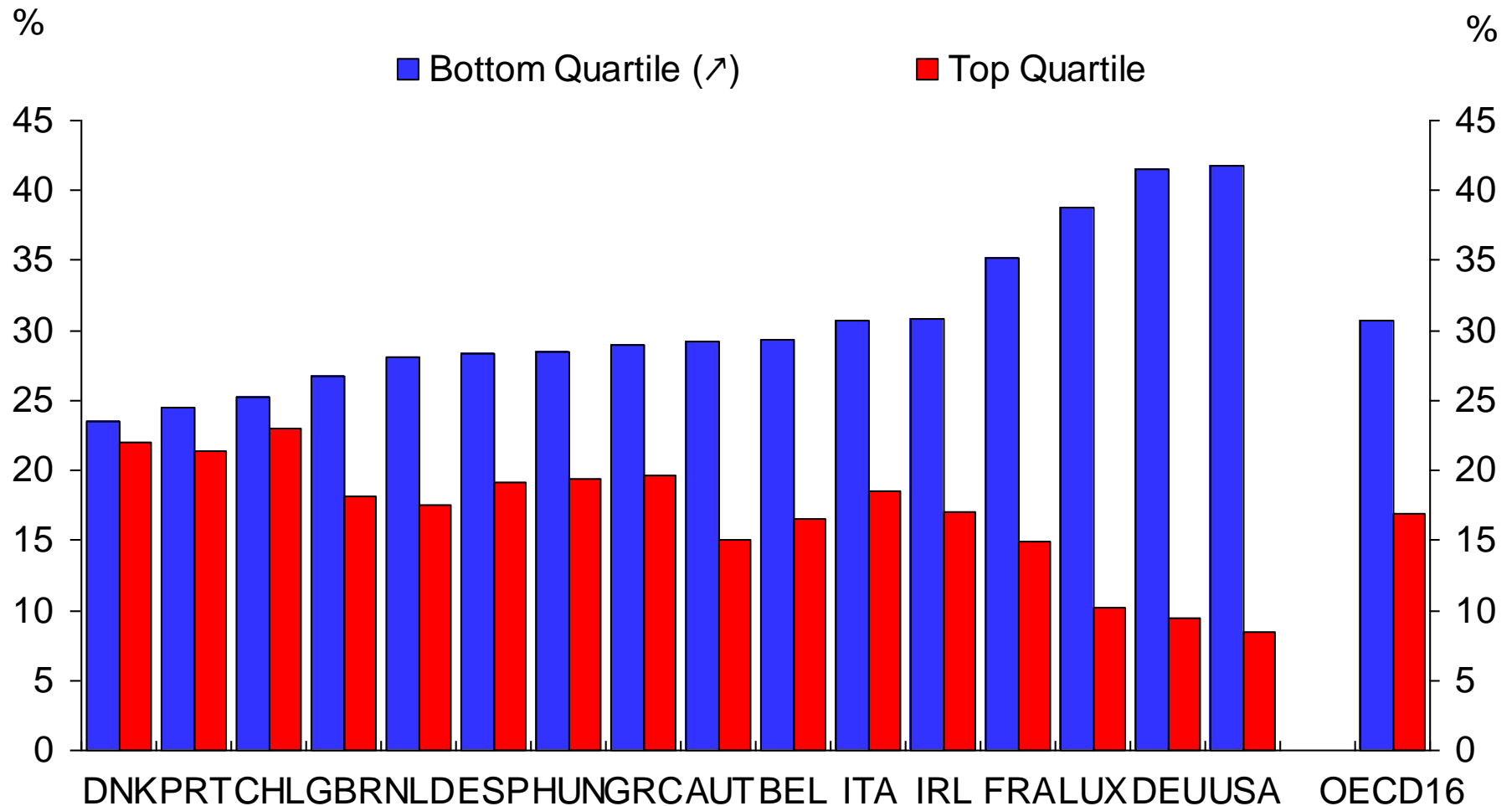
*Note: These estimates are simulation-based and intended to be illustrative. They should not be interpreted as giving the precise time that a person from a low-income household will need to reach the average income. They are based on earnings persistence (elasticities) between fathers and sons and the current level of household incomes of the bottom decile and the mean, assuming constant elasticities, following Bowles and Gintis (2002). Low-income family is defined as the first income decile, i.e. the bottom 10% of the population.*

Source: OECD, DB Global Research

# Economic mobility is particularly difficult in the United States

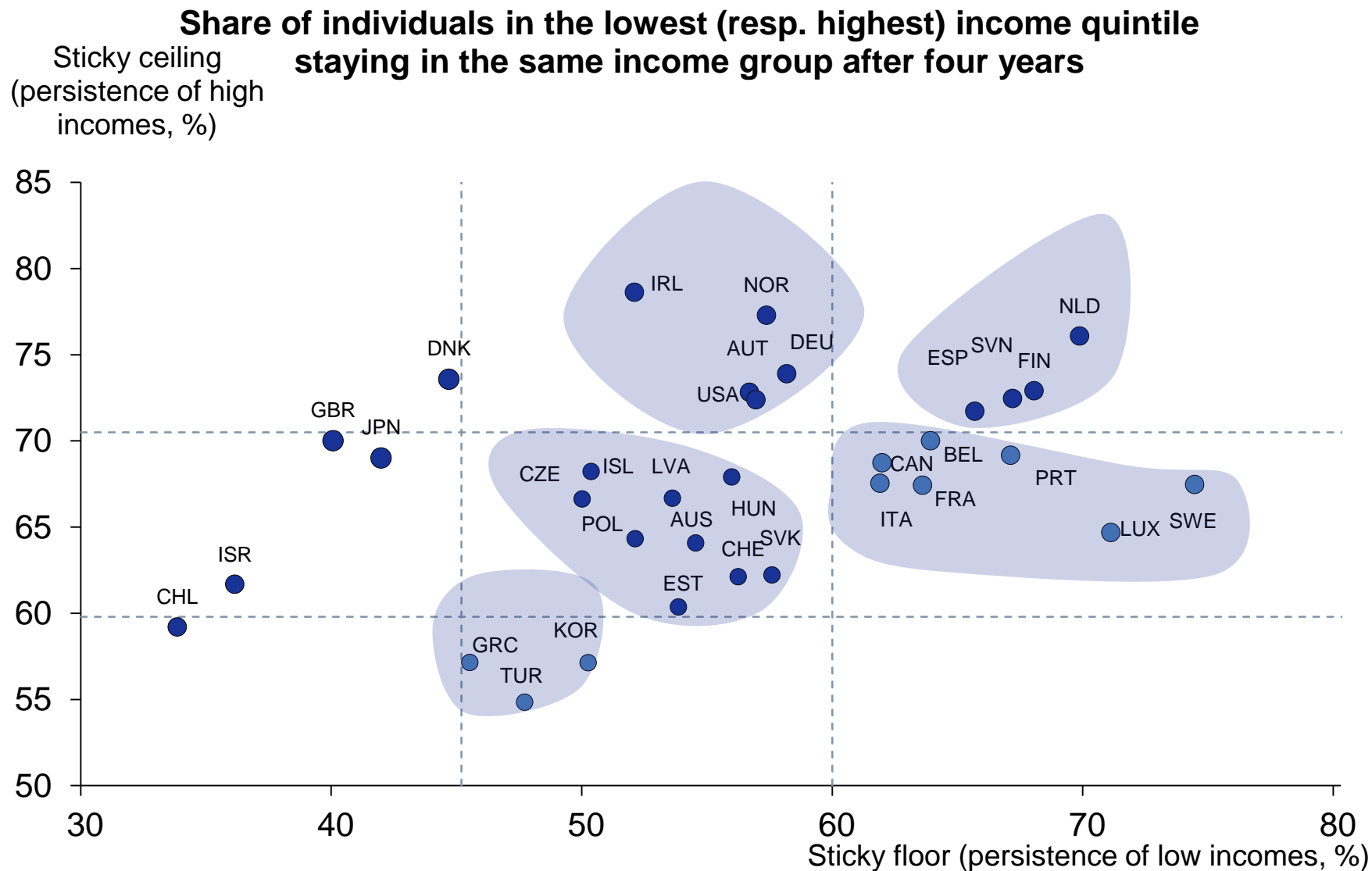


Percentage of persons in bottom and top quartile with a father in the bottom quartile of earnings



Source: OECD, DB Global Research

# Low-income and high-income persistence over four years across OECD countries



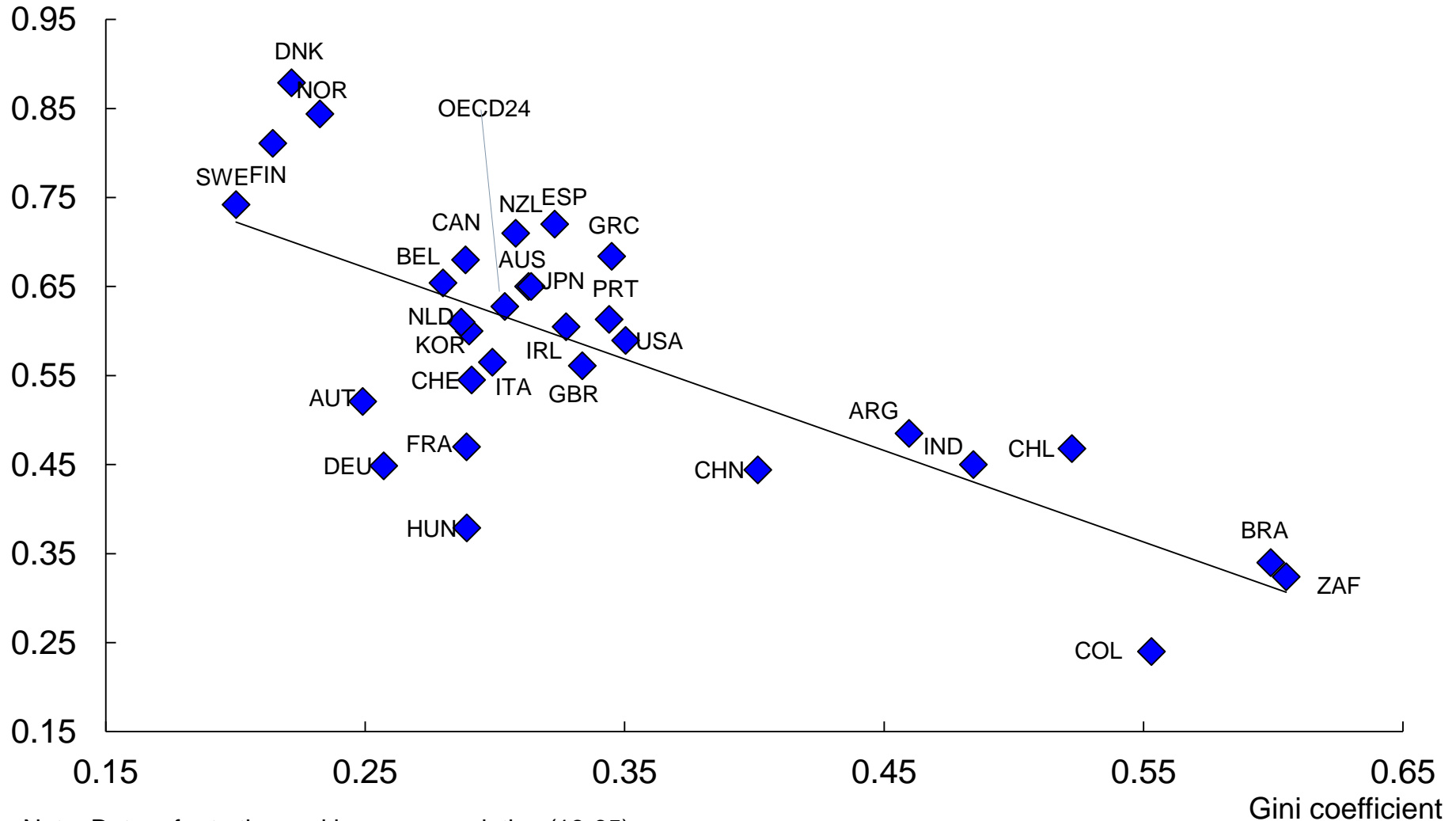
Source: OECD, DB Global Research

# Across generations, earning mobility prospects tend to be lower in countries with high inequality and vice versa



Intergenerational earnings mobility

**The Great Gatsby Curve**  
Intergenerational earnings mobility vs income inequality



Note: Data refer to the working-age population (18-65).

Source: OECD, DB Global Research

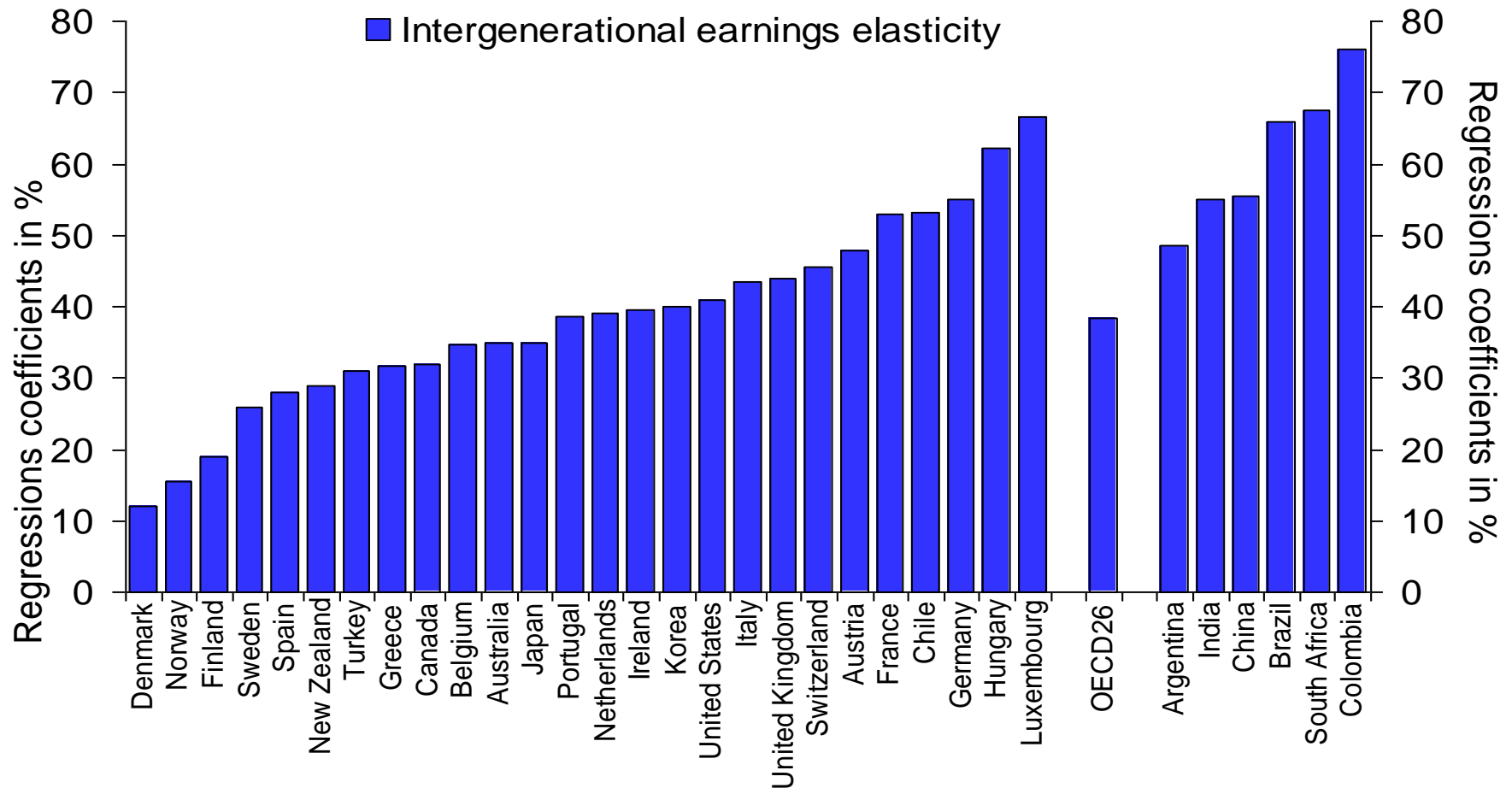


# Assessing earnings mobility across generations: elasticity of earnings



# Intergenerational earnings elasticities

## Earnings elasticities for father to son, late 2000s

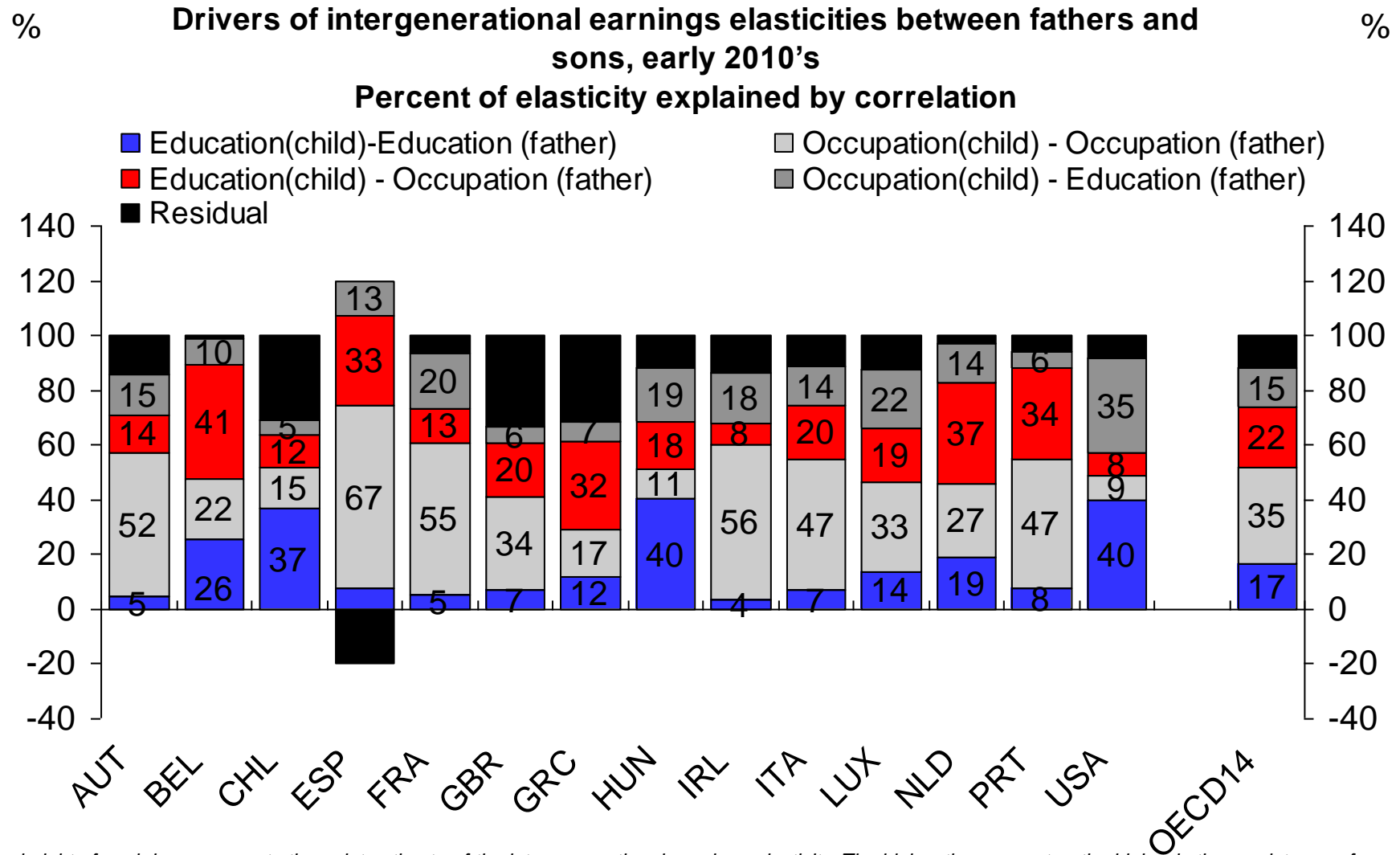


Note: The height of each bar represents the best point estimate of the inter-generational earnings elasticity. The higher the parameter, the higher is the persistence of earnings across generations, and thus the lower is inter-generational mobility. The estimate for Luxembourg is not comparable to those of other OECD countries as it exhibits a specific migration pattern, with 46% of people who were foreign born in 2015, compared to 13% on average in the OECD (OECD International Migration Outlook, 2017). Many of these individuals did not grow up and study in Luxembourg. Therefore, the level of mobility cannot be related to the level of cross sectional inequality in Luxembourg

Source: OECD, DB Global Research



# Drivers of intergenerational earnings



Note: The height of each bar represents the point estimate of the inter-generational earnings elasticity. The higher the parameter, the higher is the persistence of earnings across generations, and thus the lower is inter-generational mobility. ...: not available.

Source: OECD, DB Global Research

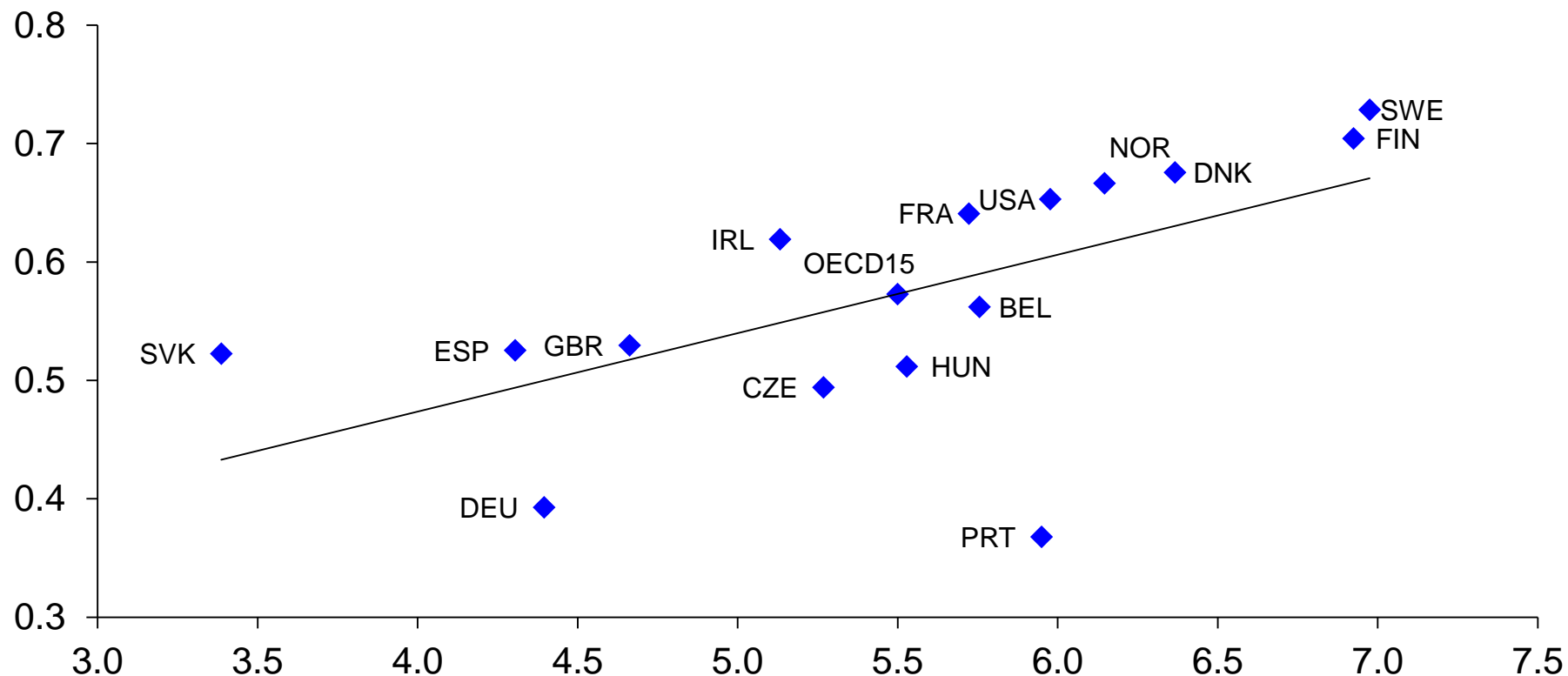


# Educational mobility is higher in countries where public spending on education were higher



Intergenerational educational mobility

## Intergenerational educational mobility

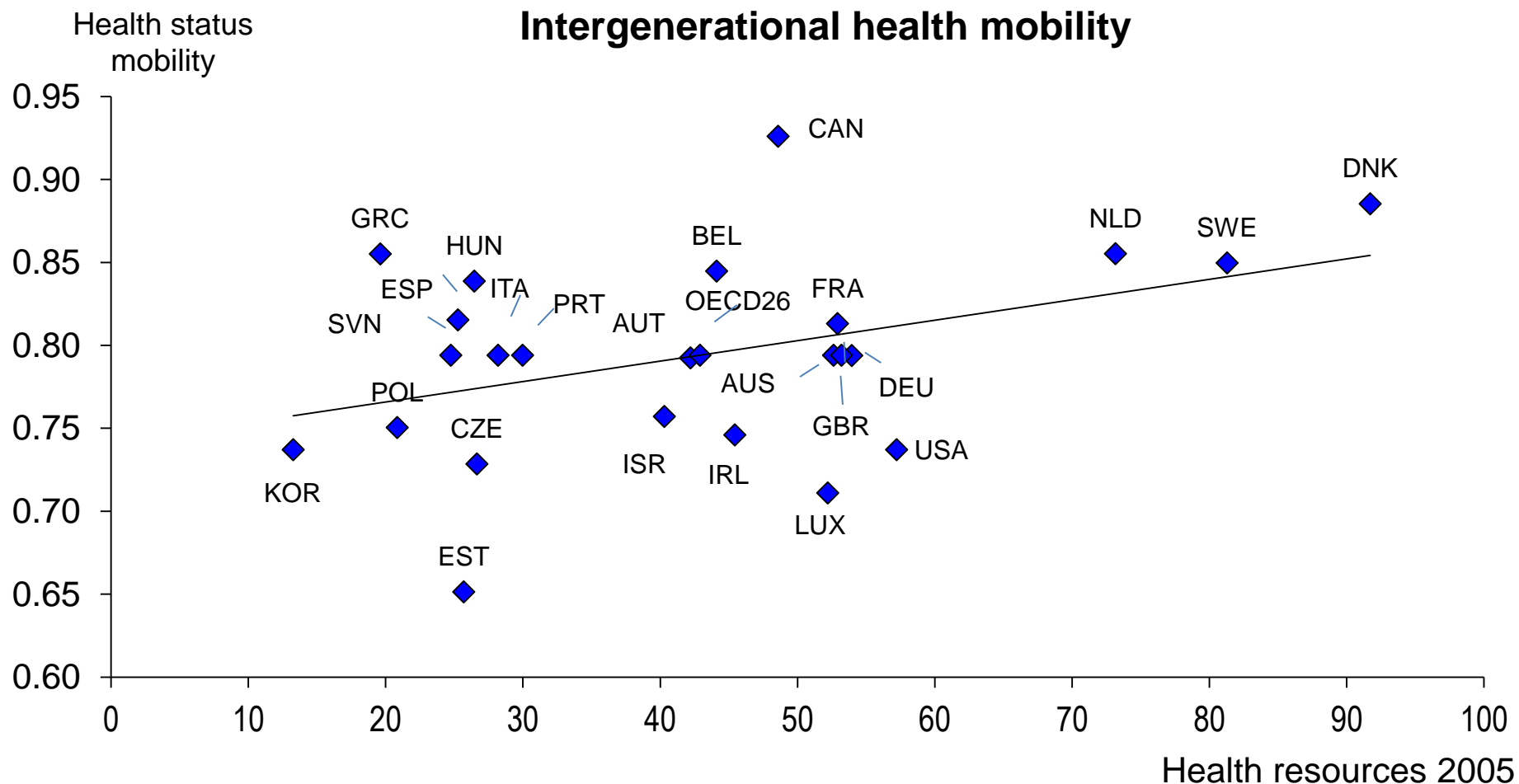


Public expenditure on education as a percentage of the GDP in 1995

Note: Intergenerational educational mobility is measured as 1 minus the intergenerational educational persistence, defined as the regression coefficient between parental and children's years of schooling at age 30-55.

Source: OECD, DB Global Research

# Health mobility is higher in countries where health and social employment is higher



Note: Health resources defined as total health and social employment in 2005 per 1000 persons. Intergenerational health mobility is measured as 1 minus the intergenerational health persistence, defined as the regression coefficient between parental and children's self-assessed health status.

Source: OECD, DB Global Research

# OECD Dashboard of relative mobility across different dimensions



Country	Income Inequality level	Social mobility across generations				Own income mobility			
		Earnings	Occupation	Education	Health	Bottom	Changes since 1990s	Top	Changes since 1990s
Denmark	Low	High	High	High	High	High	→	Low	↘
Finland	Low	High	Low	Medium	-	Low	↘	Low	→
Belgium	Low	Medium	Medium	Low	High	Low	→	Low	↘
Norway	Low	High	High	Medium	-	Medium	-	Low	-
Sweden	Low	High	Medium	High	High	Low	-	Medium	-
Hungary	Medium	Low	Low	Low	High	Medium	-	Medium	-
Germany	Medium	Low	Medium	Low	Medium	Medium	→	Low	↘
Poland	Medium	-	Low	Low	Low	Medium	-	High	-
France	Medium	Low	Low	Medium	Medium	Low	↘	Medium	↗
Korea	Medium	Medium	Low	High	Low/medium+	High	↘	High	↘
Switzerland	Medium	Low	Medium	Medium	High	Medium	-	High	-
Ireland	Medium	Medium	Medium	Medium	Low	High	→	Low	↘
Netherlands	Medium	Medium	High	Medium	High	Low	↘	Low	↘
Canada	Medium	High	-	High	High+	Low	↘	Medium	→
Italy	Medium	Medium	Low	Low	Medium	Low	↘	Medium	→
Japan	Medium	Medium	-	High	-	High	-	Medium	-
Portugal	High	Medium	Low	Low	Low	Low	↘	Medium	→
Australia	High	Medium	Low	High	Medium+	Medium	-	High	-
Greece	High	High	-	-	High	High	↗	High	↗
Spain	High	High	Low	Low	Medium	Low	↘	Low	↘
New Zealand	High	High	-	-	-	-	-	-	-
United Kingdom	High	Low	High	Low	Medium+	High	↗	Medium	→
United States	High	Medium	High	High	Low/medium+	Medium	↘	Low	↘

+ Qualitative assessment \* Based on pseudo-panels.

Note: Countries are ranked by level of income inequality (Gini coefficient), in ascending order. Each sub domain refers to a specific indicator or regression coefficient assessing inter-generational of intra-generational social mobility. The level of mobility for each domain is assessed on a qualitative way, by looking at the distribution of each indicator in each domain. For instance, countries are defined as having low level of income inequality if their Gini coefficient falls within the first one-third of the cross country distribution of Gini coefficients.

Source: OECD, DB Global Research



## Torsten Slok, Ph.D.

- **Chief International Economist, Managing Director**
- **Deutsche Bank Securities, Inc.**
- Torsten Slok joined Deutsche Bank Securities in the fall of 2005.
- Mr. Slok's Economics team has been top-ranked by Institutional Investor in fixed income and equities since 2010. Slok currently serves as a member of the Economic Club of New York
- Prior to joining the firm, Mr. Slok worked at the OECD in Paris in the Money and Finance Division and the Structural Policy Analysis Division. Before joining the OECD he worked for four years at the IMF in the Division responsible for writing the World Economic Outlook and the Division responsible for China, Hong Kong, and Mongolia.
- Mr. Slok studied at University of Copenhagen and Princeton University. He has published numerous journal articles and reviews on economics and policy analysis, including in Journal of International Economics, Journal of International Money and Finance, and The Econometric Journal.



# Appendix 1

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