Economic mobility in the United States

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DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1.
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

Inequality Drivers

- **Technological change**
  - Technological change disproportionately raise demand for capital and skilled labor over low-skilled and unskilled labor by eliminating many jobs through automation or upgrading the skill level required to attain or keep those jobs.

- **Trade globalization**
  - Trade openness raises skill premium, but also increases real wages by lowering import prices. While increased trade lower income inequality in EMEs by increasing demand and wages for abundant lower-skilled workers.

- **Financial globalization**
  - FDI and portfolio flows increase income inequality through concentration of foreign assets and liabilities in relatively higher skill- and technology-intensive sectors, pushing up demand for wages of higher skilled workers.

- **Labor market institutions**
  - More flexible labor market institutions can pose challenges for workers, especially those with low skills, and hence play an important explaining role in inequality developments.

- **Tax policies**
  - Governments in advanced economies have historically mitigated inequality through public policy—primarily progressive taxes and social transfers such as public retirement benefits.

- **Education**
  - Effect of increased educational attainment on income inequality could be either positive or negative depending on the evolution of rates of return to education.

**Source:** OECD, DB Global Markets Research
Steady decline in the share of children earning more money than their parents

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

Financial resources: percent with zero or negative non-home wealth

A record high 30% of households have no wealth

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

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

Inequality trends began in the mid-1980s

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

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

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

Mean Net Worth by age group
(Ratio to Overall Mean)

- Under 35
- 35-44
- 45-54
- 55-64
- 65-74
- 75 & over

Economic mobility deteriorating more in Ohio and Michigan

Trends in Absolute Mobility: Selected States by Decade
% of Children Earning more than their Parents

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.

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

- US
- UK
- Denmark
- Canada

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

Sticky ceiling (persistence of high incomes, %)

Share of individuals in the lowest (resp. highest) income quintile staying in the same income group after four years

Source: OECD, DB Global Research
Across generations, earning mobility prospects tend to be lower in countries with high inequality and vice versa.

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

Intergenerational earnings elasticity

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

Drivers of intergenerational earnings elasticities between fathers and sons, early 2010’s
Percent of elasticity explained by correlation

<table>
<thead>
<tr>
<th>Education(child)-Education (father)</th>
<th>Occupation(child) - Occupation (father)</th>
<th>Education(child) - Occupation (father)</th>
<th>Occupation(child) - Education (father)</th>
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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.

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

Intergenerational health mobility

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
<table>
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<th>Country</th>
<th>Income Inequality level</th>
<th>Earnings</th>
<th>Occupation</th>
<th>Education</th>
<th>Health</th>
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+ 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 or 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.
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