

**PRODUCTIVE EQUITY: The Twin Challenges
Of Reviving Productivity and Reducing Inequality**

FACT SHEET

TECHNOLOGY is the Dominant driver of PRODUCTIVITY and living standards - Innovation is observed all around us

- *Technology applications appear highly productive, some have 'natural monopoly' characteristics
- *Contemporary mix, demand selection, pace of change, domestic law and international rights and corporate globalization combine to enhance market power
- *U.S. government **R&D expenditure** now **0.6% of GDP vs 1.2% in 1980's**; private spending focused more on Development
- *There is **Faster diffusion of technology from country to country** (intra-firm transfers enhances market power) - **slower within countries**
- *Patent lawsuits have increased by at least 8 times between 2003 and 2011 in the U.S.

*Shift in U.S. Investment as % of GDP	1977	2015
Intangible Investment (output of R&D, design, training, operating models, or knowledge)	8%	15%
Tangible Investment (equipment, machinery, and structures)	16%	10%

PRODUCTIVITY – is experiencing low aggregate productivity improvement and growth varies between leading and other firms

- ***Productivity increased** in advanced economies **2+% 1990-2004 to 1% 2004-2016 -- leading firms 3%, 2001-2013 others 0.5%**
- *24 OECD Countries Manufacturing & non Financial Sector (firms over 20 employees):

Total Labor Productivity	2001-2013
Top 5% of Firms	35%
Remaining Firms	5%

- ***Emerging & developing economies over last 2 decades grew by 3.6%/year vs 1.1%/year in advanced economies**

*Labor Productivity (over period)	2000-04	2010-14
United States	3.6%	-0.2%
Germany	1.7%	0.9%

INVESTMENT is down, reducing technology dissemination

- *Net business investment in U.S. was **50% of net operating surplus in the early 1980s but declined to 25% in the 2010–2015 period**

*Total Capital Stock (Per Year)	U. S.	EU	Japan
1996 – 2007	3%	2.3%	2.0%
2008 – 2014	1.5%	1.3%	0.2%

*Emerging & Developing Economies - Investment Growth Per Year	
1990 – 2008	5%
2003 – 2008	12%
2010	15%
2016	4%

OUTPUT is also experiencing a decline

*GDP Growth (Per Year)	Emerging & Developed Countries		Developing Countries
	Average	Per Capita	Per Capita
1990 – 2007	2.7%	1.5%	3.8%
2008 – 2017	1.2%	0.7%	3.5%

*Avg Growth Per Year	1998–2017	2018–2030 (Proj)
Advanced Economies	1.8%	1.2%
Emerging & Developing Economies	5%	4%

MARKET POWER - Market share & indices of power are materially higher; technology rights enhance power

*Trade grew twice as fast as world GDP 1988-2008 – and has kept pace with GDP since 2012

*Some 80% of international trade is now by multinational corporations and their affiliates

*Rising Market Share of Top 4 Companies by Sales	1982	2012
Manufacturing	38%	42%
Utilities	30%	38%
Services	11%	15%
Wholesale Trade	22%	29%
Retail	15%	30%
Finance (Top 5 Banks)	24%	35%

	2000	2014
Share % of Assets	25%	45%
Share % of Corporate Profits	35%	40%

*Average markup above marginal costs *increased* between 1980 and 2014 from **18% to 67%**

*90th percentile firm in 2015 had **100% ROI** (5X median firm), up some 25% from 25 years earlier (2x median)

*Pure profits (in excess of cost of capital) in U.S. *grew from 3%* of total United States income **in 1985 to 17% in 2015**.

*Top 8 multinational **technology firms** account for ~**33% of market capitalization** of 100 most valuable firms globally, as of 2017

*New competitive entry declined in the United States and OECD countries generally

	1982	2013
United States		
New Firms (under 5 years old)	~50%	33%
Total Employment in new firms	~20%	10%

EMPLOYMENT INCOME - Share of income to Labor declined from mid 60% in 2000 to mid 50% in 2015

*From 1970 to 2015 automation changes job mix but generates positive, although declining, employment in OECD countries

*Compensation is higher in the leading firms and for higher and less available skills

*1973-2014 U.S. labor productivity *increased 72%*; median worker hourly compensation rose by 9%

* Employment in OECD countries	1995 – 2010
Middle Skill (routine)	- 20%
Low Skill (non-routine, manual)	+10%
High Skill (more education, wage premium)	+20%

*The number of *middle-income households in the U.S. fell from 58% in 1970 to 47% in 2014*

*Post-graduate degree workers in U.S. earned **215% of the wages of a high school grad in 2016 (155% in 1980)**

*Financial sector employees representing 1 in 25 workers, were 1 in 5 of the top 1% of earners in Europe

*U.S. top 1% received **8% of national income in early 1980's; almost 20% in 2012 – less extreme elsewhere** *Top 0.1% rose from 2.5% to over 10%

*Top 1% globally captured approximately 80% of the growth in wealth in 2017.

***International income disparity declined** due to China, India, some Asian, Latin American & African improvements (but, excluding Asia, global aggregated disparity is unchanged for the last few decades)

*Emerging Asia average incomes, 14% of average in developed economies in 1990 grew to 25% in 2014

WEALTH - Income/wealth disparity are a product of the conditions and policies that produce them

*The wealth share of the top 1% is, on average, double that of income in advanced economies.

*Globally, **42 people own as much as almost half** - 3.7 billion - **of the world's 8 billion population**.

*In the U.S.:

***3 people own more than the bottom 160 million inhabitants;**

*the **top 1% held 50%** of the stock and mutual fund assets in 2013;

*the **top 10% held over 90%** of such assets

REDISTRIBUTION - Capacities and impact of redistribution are reduced by political values, policies & tax cuts

*Redistribution in advanced economies *offset 60%* of the increase of market inequality **from 1985 to 1995**; between 1995 and 2010 hardly any of the increase was offset.

*Net **public wealth fell from 36% to -17%** of national income between 1970 and 2015, while net **private wealth increased from 326% to 500%** of national income.

*In OECD countries personal **income tax progressivity was reduced** - top rate **from 62% in 1981 to 35% in 2015**

***Corporate rates** in advanced economies **fell from** an average of **45% in 1990 to 26% in 2015**. In the U. S. a 35% rate was reduced to a flat rate of 21% in 2017.

***Effective tax rate on wealth** in the major countries that have such data **declined from 0.9% in 1970 to 0.5% in the early 2010s**