

## Wage stagnation in the United States: some international implications

By Uri Dadush

### Summary

The rise of protectionism, economic nationalism and nativism in the United States can be attributed inter alia to the nation's wage stagnation and rising inequality. Other countries are responding by reevaluating their reliance on the American hegemon. But this is not enough. Policy-makers also need to ask what lessons they can draw for their domestic policies from the United States' success in creating wealth while, at the same time, failing to distribute it equitably and to reduce poverty at home.

### Introduction

There has been essentially no real wage growth in the United States since 1973, even as labor productivity grew rapidly. According to a recent Brookings (Brookings, 2017) report, over this period real hourly compensation (which includes benefits such as health insurance whose cost has risen far faster than inflation) increased at a rate just below 1% a year, while labor productivity increased about twice as fast. The stagnation in average US wages conceals an even more worrying disparity in outcomes between the higher- and lower-paid: while the lowest three quintiles of earners saw essentially no change in real wages over 1979-2016, the highest quintile saw wages increase by 27%.

*"The return to capital will continue to remain higher than the growth rate of the economy in the foreseeable future."*

The sharp uncoupling of labor compensation from labor productivity in the United States is arithmetically the same as a substantial increase in the share of national

income accruing to capital, representing a nearly 8 percentage points of GDP rise since 2000. Some 43% of US national income now accrues to capital, and since capital ("wealth") is far more unequally distributed across the population than labor income, this compounds the rise in inequality in the United States. High return to capital has been reflected, for example, in America's record-setting stock markets, and is -so far - consistent with Tomas Piketty's prediction that the return to capital will continue to remain higher than the growth rate of the economy in the foreseeable future.

According to the latest Cap Gemini global wealth report, the United States is now home to nearly 5 million individuals with over \$1 million of investable assets. Yet, according to the inaugural edition of a US government survey of financial wellbeing (2017), 34% of US consumers experienced material hardship over the past year, defined as the inability to buy sufficient food, pay for lodging, or receive medical treatment. According to the latest UN Human Development Report, the top 10% of earners in the United States make 18.5 times as much as the bottom 10%. This ratio is three times more than that of egalitarian Sweden, more than double that of other large advanced

economies such as France and Germany, is 50% higher than Morocco, and is even higher than that of a highly unequal developing country such as Brazil.

## International Consequences

These trends in the world's largest and, along several dimensions, richest and most advanced economy carry important political consequences. To start, the stagnation in incomes of most Americans over such a long spell, together with such disparate outcomes between "elites" and the mass, have contributed to the nation's increasingly polarized politics. High and rising income inequality also help explain the rise of left wing populism (as per the unsuccessful Presidential candidate Bernie Sanders), and of economic nationalism as personified by President Trump. It is not surprising that people who see their material expectations unfulfilled over nearly two generations become profoundly skeptical of democratic institutions such as the Press and the Congress.

*"Repercussions on international relations of America's protectionism and increasingly diffident geopolitical stance are far-reaching."*

Confronted with sagging living standards and rising competition from China, Mexico and high-income economies such as Korea, Germany and Japan, many Americans have become suspect of the trade agreements and institutions that underpin globalization, such as NAFTA and the WTO. Popular suspicions of international deals - the belief that the system is rigged against Americans - extend beyond trade to include immigration, the Paris Accord on Climate Change, the Iran Nuclear deal and even to long-standing security arrangements such as NATO.

The repercussions on international relations of America's protectionism and increasingly diffident geopolitical stance are far-reaching. Large and small countries are rethinking their alliances, and many are adapting their foreign, security, and trade policies to become less reliant on the United States. Already, China appears to cut a larger figure on the world stage, and the European Union appears to be closing ranks and to have been reenergized despite the Brexit shock. The EU, China and Japan have reaffirmed their opposition to protectionism. Without the United States, which has rejected the Trans-Pacific Partnership, the other eleven members, led by Japan, are trying hard to renegotiate a deal among themselves. The

EU and Japan have reached an agreement in principle over a free trade agreement. During President Putin's visit to China in July, he described China-Russia relations in glowing terms: "the best ties in history". President Xi Jinping replied that China and Russia were each other's "most trustworthy strategic partners".

## Domestic Consequences

But the repercussions of America's shift extend beyond international diplomacy to the home sphere. Policy makers around the world should ask what they learn from the American experience in framing their own domestic policies. True, no automatic extrapolation is possible. The differences in factor endowments, economic structure, and institutional frameworks between the United States and rich economies such as Italy, and, even more, between the United States and middle-income developing economies such as Morocco, Peru, or Thailand, are vast, and those between a low-income economy such as Ethiopia or Nigeria and the world's largest economy are greater still. Yet, I believe that, recognizing these differences, some useful pointers can be drawn.

*"At least in the American case, the "Washington consensus" has come to constitute a paradox, where widespread economic hardship coexists with plenty."*

The American system, more than any other, inspired what John Williamson called "the Washington consensus", a set of policies consisting essentially of reliance on markets, promotion of macroeconomic stability, and protection of property rights. At least in the American case, the "Washington consensus" has come to constitute a paradox, where widespread economic hardship coexists with plenty. The "plenty" aspect of the paradox is well understood. After all, policy-makers across the world have long been exposed to the wealth-creating virtues of the American system by the World Bank, International Monetary Fund, and the US State Department. But what lessons should they draw from America's wage stagnation and its 40 million people officially below the poverty line? In the interest of brevity, I focus here on four implications that I believe are most important and robustly supported by the evidence. I will draw some pointers on policy in the concluding paragraphs of this brief.

## Expect the dis-equalizing effect of technological change to persist

In the age of artificial intelligence, it is now possible to conceive of machines that replace doctors, lawyers, chief financial officers and CEOs. That day may come, but the dominant form of technological innovation today as in past decades does the opposite: it replaces manual workers who do repetitive work with machines and places a premium on the highly educated, creative and on those adept at people management and networking. In the jargon of economists, technological change today is predominantly “skill-biased” As the world’s highest wage and most technologically advanced economy, the United States is typically the first or among the first to experience the effect of skill-biased technological change on work patterns. In this domain, it is reasonable to look at the United States as the bellwether economy.

*“ It is within [the agriculture and manufacturing] sectors that the demand for unskilled work declines most rapidly, while the number of skilled workers they employ relative to the number of unskilled workers continues to increase.”*

Technological change is good, of course – it is the main driver of long-term economic growth. Until not too long ago, its effect was most evident in the production of goods, i.e. in agriculture and manufacturing. Across nearly all the advanced countries over many decades the volume of agricultural and manufactured goods has expanded rapidly, yet both these sectors continue to shed workers. And it is within these sectors that the demand for unskilled work declines most rapidly, while the number of skilled workers they employ relative to the number of unskilled workers continues to increase. Over the last several decades, in advanced countries, services have been the fastest growing sectors of the economy and the source of all net job creation (Dadush, 2015).

However, information and communications technologies are increasingly shifting demand towards the most skilled workers in services sector as well. According to a recent comprehensive study by McKinsey almost one fifth of time that Americans spend in the workplace is highly automatable using existing technology, i.e. not requiring new inventions. Inventions now in the pipeline make it clear that much more change is coming. For example, professional drivers, including the drivers of trucks, taxis,

etc., today represent the single largest category of US workers, and many experts believe that self-driving vehicles will likely largely displace them within a generation. In a highly flexible labor market and strong investment climate such as the United States, these trends are unlikely to result in a secular increase in unemployment as new jobs will be created, but so long as the demand for less-skilled workers continues to decline, the wage gap between the high- and low-paid will continue to widen.

*“...in developing countries that grow slowly or not at all, such as Russia in recent years and South Africa, and where wages are already low, political tensions induced by technological change and wage stagnation may be just as pronounced as in advanced countries, or more so.”*

It is tempting to believe that, while the dis-equalizing effects of technology remain prevalent in the United States and the wealthiest advanced countries, developing countries will be sheltered by their low wages. But even in a low-wage economy, in an open and competitive system where access to technology is widely available (it can be imported, adapted by local firms, or deployed by foreign investors), and where labor productivity is low, the incentive to adopt labor-saving technologies is often strong. An important feature of new information and communications technologies is that many of its most valuable applications do not require large investment outlays. But even where outlays are sizable, the incentive to automate is strong. China, for example, still has very low labor costs by the standard of advanced countries, yet it represents the world’s largest market for industrial robots. And the decline in manufacturing employment is certainly not limited to advanced countries, prompting some economists to speak of “premature deindustrialization” (Rodrik, 2015). Despite the fact that inequality is higher in developing than advanced countries, several of the largest and most advanced developing economies – including China, India, Mexico, Russia and South Africa – have seen rising inequality in recent decades (Bourguignon, 2015).

Still, the political tensions that arise from rising inequality induced by technological change may be less evident in some developing countries than in advanced countries. In developing countries which experience rapid growth, such as China and India, the wages of unskilled workers continue to rise; even though the wages of unskilled workers rise more slowly than those of skilled workers



there is a visible sharing of the new wealth created. On the other hand, in developing countries that grow slowly or not at all, such as Russia in recent years and South Africa, and where wages are already low, political tensions induced by technological change and wage stagnation may be just as pronounced as in advanced countries, or more so.

*“...trade and foreign investment cause increased competitive pressure, especially that arising from China and other low-wage economies, obligating firms to adopt labor-saving strategies.”*

### Expect globalization to accentuate the dis-equalizing effects of technology

International trade is good. Dating back to Adam Smith and David Ricardo, any number of studies have shown that trade can boost both the level of income and its long-term growth rate. The academic consensus is that technology, not trade and globalization, is mainly to blame for wage stagnation in the United States. Nevertheless, globalization can accentuate the effects of technological change on inequality in advanced countries. The main mechanism, as I see it, is as follows: trade and foreign investment cause increased competitive pressure, especially that arising from China and other low-wage economies, obligating firms to adopt labor-saving strategies. Whether these strategies consist of automation, outsourcing, refocusing the firm on higher value-added activities, or exiting the business to leave the field for more efficient firms, the effect will nearly always be to reduce the demand for unskilled labor.

Globalization also increases the size of the market to its maximum possible extent, creating many opportunities to exploit economies of scale and developing monopolistic or oligopolistic positions in markets based on branding, techniques, cost, or network effects. Combined with advances in information and communication technologies globalization has created many winner-takes-all markets in fields ranging from sports and entertainment, to medicine, to fashion, and to specialized apps such as ones that enable me to find directions to any address in the world or the latest weather forecast for any location.

Does globalization also increase inequality in developing countries? Influenced by trade theories based on factor endowments, economists used to believe that increased trade would be equalizing in developing countries as it would raise the wages of unskilled workers, expanding

unskilled-labor-intensive industries in which developing countries have comparative advantage. However, while this effect is clearly at play in some developing countries, recent evidence suggests that more complex forces are at work, and that they operate in the opposite direction, namely to increase income inequality. As already described above, globalization creates strong incentives to adopt more advanced techniques even where wages are low. (Dadush and Shaw, 2012 and Dadush, 2015)

### Investments in education help mitigate wage stagnation but do not necessarily reduce inequality

The large divergence in incomes across the US population is strongly correlated with educational attainment. The United States has made large investments in education, with the share of workers having completed at least a four-year college degree increasing from 23% in 1979 to 40% in 2016. These investments have clearly helped sustain average wages by boosting worker productivity. For example, whereas college graduates represent less than 20% of the bottom quintile in incomes, they represent over 75% of the top quintile. However, these investments in education may also have contributed to increased inequality as the wage premium that college graduates commanded over those with high-school or less increased from 134% in 1979 to 168% in 2016. (Brookings, 2017)

*“...globalization creates strong incentives to adopt more advanced techniques even where wages are low.”*

In recent years, as the supply of college graduates increased and economic growth has slowed, the rise in the college premium has also slowed. Quality may provide part of the explanation for the slowing of the college premium. I am not aware of objective tests of the quality of college education in the United States. However, quality of education as measured, for example, by PISA scores – based on tests which measure mathematical and language proficiency at age 15 – are far below benchmarks that would correspond to the US income level. Students in Vietnam, whose per capita income is less than 1/10th that of the United States, perform better on science, mathematics and reading than Americans (OECD 2015). Also important is the extent to which the supply of graduates matches demand. Despite the increased supply of graduates, American businesses struggle to recruit enough science and mathematics majors.

## Integration of women in the labor force boosts economic growth but its effect on inequality is difficult to discern

Women's participation in the US labor force increased sharply from just 33% in the years immediately following World War 2, to reach a peak of 60% in 1960, and has since declined a bit to near 57%. The increased utilization of half the US potential labor force has been clearly beneficial, contributing to faster economic growth and to the improved standard of living among women and to that of their male partners when they form a household. While the wages of white male workers have declined since 1979, those of white women have increased by 34% (Brookings, 2017). Since wages of women were much lower than those of men and continue to be lower, increased women participation has reduced but not eliminated inequality between men and women. At the same time, women have competed in the labor market with men, and more women now complete college than men. The effect on the broader income distribution is difficult to discern, in part because of the tendency of people to "match" - higher-income men and women tend to choose each other to form a household.

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### Policy

America's wage stagnation over nearly two generations is striking, and even more so considering the country's economic growth record which is in line with that of other advanced countries. This brief examination shows that the forces driving economic growth, technological change and globalization, tend also to contribute to the stagnation of the wages of unskilled workers and to increase inequality. It also shows that two commonly applied growth levers, namely investments in education and encouragement of the participation of women in the labor force, do not necessarily have a big effect on income inequality.

In fast-growing developing countries increased inequality is unlikely to be accompanied by stagnating wages of

the unskilled, as in the United States. On the contrary wages of the unskilled in countries such as China, India and Vietnam tend to rise, even as those of the skilled rise even faster. In contrast, in moderate and slow-growing advanced countries and in lagging developing countries, rising inequality and flat or declining wages of the unskilled can form a combustible political mix.

The policy in response is clearly not to stymie technological change. Nor should policy-makers yield, as the Trump administration is inclined to do, to the temptation of protectionism. And education and gender policies should be pursued as growth-enhancing strategies even if their effect on inequality is difficult to gauge.

There is no single or simple answer to the stagnation of wages and to high and rising inequality. Governments across the world have helped mitigate the problem through a combination of progressive taxation, transfers to the most vulnerable in society, and regulations that aim to curb monopoly power and enhance the welfare of workers. This is another area where the United States falls short. Comparing its GINI coefficient post 2010 before and after taxes and transfers, it declines by about 18% - i.e. in the direction of improved equality. However, this same measure declines by nearly 30% in Germany and 40% in Finland (OECD, 2016), and the United States redistributes less than any other OECD country except for Japan, Switzerland, Mexico, Korea and Chile. The Federal minimum wage in the United States is lower today in real terms than in 1980. It is profoundly ironic that the Trump administration, which may owe its election to rising inequality, is advocating cuts in health care for the poor, as well as cuts in corporate taxation that would reduce the already modest redistributive effect of government in the United States.

In most countries there is a rich agenda of fiscal and regulatory reform which can increase the progressivity of taxes and transfers, without at the same time burdening the economy with unsustainable budget deficits or dulled incentives. Detailing these steps goes beyond the scope of this brief, but the strategy nearly always entails eliminating wasteful subsidies, making social and infrastructure spending better targeted, improving the efficiency of public services, especially in education and health, rationalizing labor and product market regulations, fighting tax evasion, and eliminating what Americans call "tax expenditures" – arbitrary tax exemptions that favor specific interest groups (IMF, 2016; Dadush, Dervis, et al. 2012).

## Conclusion

This brief has argued that, while not the only cause, wage stagnation and rising inequality in the United States helps us understand the turn of the United States towards protectionism and economic nationalism. Countries are already busy rethinking their foreign policies. They should also be keen both to learn from

the United States' remarkable success in generating wealth and its remarkable failure in rewarding workers for their increased productivity and in alleviating poverty. Governments should persist in encouraging technological innovation, globalization, education and gender parity. Most important now is to take a fresh look at how governments can enhance their redistributive role without undermining fiscal sustainability and dulling incentives.

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