Rubin, Jeff

Book

Has global trade liberalization left Canadian workers behind?

Centre for International
Governance Innovation

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Centre for International Governance Innovation

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About the Author

Jeff Rubin is a CIGI senior fellow. A Canadian economist and bestselling author, Jeff is a world-leading energy expert and former chief economist and chief strategist at CIBC World Markets.

In his first research mandate at CIGI, Jeff explored the future of Canada's oil sands in an emissions-constrained world, the case for a national carbon tax, as well as that for divestment from Canadian fossil fuels, and the opportunities that climate change itself might bring to the Canadian economy.

Jeff is currently researching the implications of shifting US trade, energy and environmental policies on the Canadian economy under the Trump administration, including a critical assessment of how Canada's auto industry has performed relative to its NAFTA trading partners, an exploration of whether globalization has left Canadian workers behind and an examination of whether shifts in US energy and environmental policies will have a discernible impact on the future of Canada's fossil fuel industries.

Jeff began his career in 1982 at the Ontario Ministry of Treasury and Economics, where he rose to become the senior policy advisor for the Macroeconomic Forecasting and Analysis Group. In 1988, Jeff left the Ontario government to join the brokerage firm Wood Gundy as their senior economist. In 1991, he was appointed chief economist and managing director at the investment bank CIBC World Markets, where he served for two decades. During that time, he received 10 number one citations from Brendan Wood International as the top-ranked economist in Canadian financial markets. In 2007, Jeff was appointed as the firm's chief equity strategist in addition to his responsibilities as chief economist.

Jeff resigned from CIBC World Markets in 2009 to pursue a career as an author. His first book, *Why Your World Is About to Get a Whole Lot Smaller*, was an international bestseller, and was favourably reviewed in both *Time* and *Newsweek*. The book was the number-one-selling non-fiction book in Canada and won the National Business Book Award, as well as being long-listed for the Financial Times and Goldman Sachs Business Book of the Year Award. Since then, he has written two other bestsellers, *The End of Growth* and *The Carbon Bubble*.

About the Global Economy Program

Addressing limitations in the ways nations tackle shared economic challenges, the Global Economy Program at CIGI strives to inform and guide policy debates through world-leading research and sustained stakeholder engagement.

With experts from academia, national agencies, international institutions and the private sector, the Global Economy Program supports research in the following areas: management of severe sovereign debt crises; central banking and international financial regulation; China's role in the global economy; governance and policies of the Bretton Woods institutions; the Group of Twenty; global, plurilateral and regional trade agreements; and financing sustainable development. Each year, the Global Economy Program hosts, co-hosts and participates in many events worldwide, working with trusted international partners, which allows the program to disseminate policy recommendations to an international audience of policy makers.

Through its research, collaboration and publications, the Global Economy Program informs decision makers, fosters dialogue and debate on policy-relevant ideas and strengthens multilateral responses to the most pressing international governance issues.

Executive Summary

This paper summarizes a range of developments in Organisation for Economic Co-operation and Development (OECD) economies associated with trade liberalization and then examines the extent to which they have been present in the Canadian economy. Among the developments considered are the secular loss of goods-producing jobs, in particular manufacturing jobs; stagnant or anemic wage growth; declining union membership and a diminishing role for collective bargaining; a shrinking middle class; and growing income inequality, as well as a shift in factor income from labour to capital. It then explores to what extent these trends have been present in the Canadian economy and assesses to what extent they have been mitigated, if at all, by the tax and transfer system.

Introduction

How has the Canadian economy adjusted to global trade liberalization over the last several decades? As one of the most trade-dependent economies in the Group of Seven (G7), the Canadian economy has been impacted as much as any by the huge reduction in tariffs that have attenuated multilateral trade liberalization under the auspices of the World Trade Organization (WTO), as well as a number of bilateral and trilateral free trade agreements, most notably the North American Free Trade Agreement (NAFTA). To what extent can the trends resulting from the impact of global trade liberalization on other OECD economies be found in the Canadian case?

Of particular interest to this paper is the fundamental change in Canadian employment with respect to both the quality and type of jobs created and their wage characteristics. These job and wage characteristics will be related to trends toward increasing inequality in Canadian income distribution. The paper will examine to what extent, if any, the tax and transfer system has ameliorated these trends.

Global Trade Liberalization Is Widely Credited with Reducing International Economic Disparities

Global trade liberalization has been credited with lifting more than one billion people out of poverty, mostly in the rapidly developing economic behemoths China and India. The rapid rise in average incomes in those countries, coupled with their huge weight in world population, has narrowed international income disparities to their lowest level during the entire postwar era.[1] Indeed, for the first time in nearly two centuries, global inequality is shrinking after rising steadily as the Industrial Revolution catapulted Western Europe and North America to what once appeared to be insurmountable leads over the rest of the world (Hammond 2017).

But that development, much touted by free trade advocates, belies a less flattering pattern of growing and unprecedented income inequality in the very developing countries considered to be the prime beneficiaries of global trade liberalization, as well as unprecedented inequality in the developed world, where virtually all of the economic gains from global free trade have accrued to a very narrow base of the population.

At the international level, the economic gains from globalization in the developing world seem to be highly concentrated among a handful of nations — primarily in Asia, and hence very unevenly distributed within the developing world. For example, China, India, Brazil, Indonesia, Nigeria, Australia, Mexico, Venezuela, Turkey, South Korea, India, Thailand and Poland accounted for more than 80 percent of the decline in the G7's share of world manufacturing output (Baldwin 2016, 89). Excluding that narrow group of countries, the rest of the world's share of global manufacturing is only marginally more today than it was 40 years ago, despite the massive movement of factories from G7 and other mature OECD economies to cheap

1 If weighted by population, international income disparities have been narrowing since the 1970s, largely as a result of strong economic growth rates in China and India, the world's two most populous countries. However, even on an unweighted basis, international disparities have been narrowing since around 2000.

overseas labour markets. Latin America and Africa, for example, have seen minimal gains (Baldwin 2016).

Even within those rapidly industrializing countries, income gains have been highly skewed to the top income strata of the population. That is particularly the case in China, which has grabbed the lion's share of the developing world's economic gains from trade liberalization, increasing its share of world manufacturing output from three percent in 1970 to more than 20 percent, surpassing the United States as the world's largest manufacturer, back in 2010 (Baldwin 2016, 390). Despite strong, if not spectacular, gains in absolute incomes among both urban and rural workers and the rapid emergence of a burgeoning middle class, income inequality has increased measurably over the last four decades. The country's Gini coefficient,[2] a widely recognized measure of income inequality, has risen from slightly below 0.30 in 1975 to almost 0.50 by 2012 (Milanovic 2016, 177), a whopping 60 percent plus increase.

But where the distribution of the gains from globalization has become most questioned is in the advanced economies, whose slowing rates of economic growth are the counterpart to the torrid paces clocked by the booming economies of China and India. Moreover, the quality of new jobs created in these economies has fallen steadily, exacerbating income inequalities. Over time, it has become increasingly clear that the massive outsourcing of jobs to low-wage countries has had a profound impact on labour markets in developed countries, both closing factories and depressing wages in factories that have managed to remain operating. Stagnation, if not actual declines, in real incomes have become the norm for most workers in OECD economies over the last several decades, providing an economic backdrop to growing opposition in those countries to further free trade agreements.

Indeed, many of global trade liberalization's greatest advocates, including economists and Nobel Prize laureates Joseph Stiglitz and Paul Krugman, as well as former US Treasury Secretary Lawrence Summers, are now having sober second thoughts on the subject (Saval 2017). Originally, they and most other economists thought that trade with low-wage countries was too small to act as an effective brake on wages in much richer OECD economies. Instead, they, along with the majority of economists, held that the labour-saving bias in technological change, associated in particular with the digital revolution and advanced automation such as autonomous robotics and, more recently, artificial intelligence, was to blame for the loss of high-paying industrial jobs and stagnant wages in OECD countries. But as trade between OECD and developing countries mushroomed, in particular following China's inclusion into the WTO, as well as successive rounds of multilateral trade liberalization and a plethora of bilateral free trade deals, the impacts on OECD labour markets became increasingly evident. Just as rust-belt states chock full of displaced industrial workers in the United States voted for Donald Trump's protectionist platform, support for Brexit was strongest in areas of the United Kingdom where there were the largest declines in manufacturing and industrial employment.

Of course, the two schools of thought are not mutually exclusive. Global trade liberalization has not only accelerated the rate of technological diffusion around the world, but has also been a critical factor in controlling the cost of new technology. For example, while Apple designs its iPhones in the United States, it produces most of them in China, which helps reduce its costs and hence makes its iPhone technology accessible to a wider market.

The Stylized Traits of Global Trade Liberalization in OECD Economies

While global trade liberalization has impacted each country differently, there are a number of common stylized traits that have become prevalent in most developed economies over the last three to four decades. The widespread movement of goods production to developing countries has hollowed out manufacturing industries throughout the OECD, while the threat of further displacement has depressed wage growth. Job quality has fallen steadily, with most employment growth in part-time or temporary work in low-paying service industries. Income distribution has become

2 The Gini coefficient is perhaps the most widely followed measure of income equality in an economy, with the value of the coefficient ranging from zero to one. A coefficient of zero denotes perfect equality, where national income is evenly divided over the entire population. Alternatively, a Gini coefficient of one denotes total inequality where one individual holds 100 percent of national income.

more unequal, with the greatest gains accruing to the wealthiest strata of the population while the middle class has steadily shrunk. Factor income has shifted from labour to capital as a result of the freer movement of both capital and goods and the decline in union membership in developed economies. Lastly, the tax and transfer system that previously mitigated income inequalities no longer performs that role and, in many cases, actually exacerbates inequality.

Shift of Goods Production to the Developing World

At the international level, the most telling characteristic of globalization is the movement of economic activity from the developed to the developing world. The advent of global supply chains has seen more and more manufacturing outsourced to cheap labour markets. This has often resulted in spectacular growth rates in the developing countries where goods production has migrated to, but at the expense of imploding long-established factory sectors in advanced economies.

G7 countries (the United States, Japan, Germany, the United Kingdom, France, Canada and Italy) have seen their once dominant share of global GDP shrink from almost two-thirds in 1990 to well under half today (Baldwin 2016, 88–90). Most of the decline has occurred in the manufacturing sector. Every G7 country has seen a significant decline in its share of global manufacturing output. The shift in manufacturing activity has led to an even more dramatic redistribution of factory employment around the world. By 2014, manufacturing employment in the developed world had shrunk to roughly one-quarter of the factory employment level in the developing world (*The Economist* 2017). In most OECD countries, the level of manufacturing employment today is significantly lower than it was three or four decades ago, while factory jobs as a share of total employment has plummeted. Since 1990, manufacturing employment has declined by 29 percent in the United Kingdom, 25 percent in the United States and 20 percent in Japan (Bernard 2009).

The loss of jobs in the goods sector, which have typically been the highest paying in OECD economies, is widely linked to the disappearance of the middle class and general wage stagnation in most, if not all, OECD economies.

A Shrinking Middle Class

The offshore outsourcing of jobs and the associated undercutting of wages and industrial employment is integrally linked to an increasingly skewed distribution of income in those economies, resulting in the gradual disappearance of the middle class.[3]

A declining middle class as a share of the population has become a standardized feature of virtually every OECD economy over the last four decades. Among OECD countries, the United States and the United Kingdom have seen the biggest declines (roughly a 20 percent loss from 1980 levels), but the middle class is also shrinking in countries with comparatively generous social security systems and progressive tax regimes, such as the Scandinavian countries or Germany (Milanovic 2016, 196). As their numbers have declined, so too has the middle class's economic and political importance.

Stagnant Real Wages Even with Near Full Employment

While unemployment rates in many OECD countries have reached pre-recession lows, wage inflation, for the most part, remains restrained. In fact, in most countries, real wages are either stagnant or have declined. For example, while the US unemployment rate has fallen to four percent, less than half its reading during the recession, wage gains have trailed their performance during past cycles. In the United Kingdom, British workers faced a real wage decline despite the national jobless rate falling to 4.3 percent, its lowest level since 1975. Similarly, in Japan, where the jobless rate has sunk as low as 2.8 percent, real wages rose by less than one percent (Goodman and Soble 2017). In Australia, wages at the close of 2016 were growing at less than two percent. A decade or so ago, wage rates in those countries were growing at almost twice the rates they are in the face of today's low unemployment rates.

Anemic wage growth across the OECD has been structurally linked to the growing precarity of work in those economies, where a disproportionately large share of jobs are either temporary, part time, arranged through an independent contractor or pieced out to self-employed workers (Stanford 2017). For example, almost half of Australian workers fall in one of those four work categories (ibid.).

3 The middle class is typically defined as those whose household income is between 25 percent below and 25 percent above the median income of all households in the economy.

Growing Income Inequality

During the last 30 years of global trade liberalization there has been a marked shift toward greater income inequality. Gini coefficients have risen steadily among developed countries, most notably in the United States and the United Kingdom, where levels now sit at postwar highs, but rising income inequality can be found throughout virtually all the OECD countries, including Spain, Italy, the Netherlands, Japan and even Germany.

In part, the trend toward greater income inequality found among advanced economies is due to the rise of a global plutocracy whose one percent of the world's population commands more than 15 percent of world income. For the most part, the world's super rich can be found among OECD countries and they have received the lion's share of income growth in the countries they reside in. In part, rising income inequality also speaks to the lack of income growth found among middle deciles of the population of those countries, occupying what was once considered the middle class.

Shift in Factor Income from Labour to Capital

Increased income inequality among OECD countries has coincided with an almost universal shift in factor income shares across the same community from labour to capital. The profit share of national income in most OECD countries is at or near postwar highs, a shift that, in most cases, finds its counterparts in a marked decline in the share of labour income. In the United States, capital's share of national income has risen from 35 percent to more than 40 percent over the last three decades (Elsby, Hobijn and Sahin 2013). Since the ownership of capital tends to be highly concentrated in the hands of the top income strata, who receive the bulk of dividends and capital gains, the two trends, increasing income inequality and a shift in factor shares from labour to capital, have gone hand in hand.

Declining Union Membership and the Diminishing Role of Collective Bargaining

One factor contributing to the shift in factor incomes from labour to capital has been a concomitant decline in union membership across OECD labour forces and, subsequently, a diminished role for collective bargaining in wage determination. The trend is widely credited with contributing to wage stagnation if not wage rollbacks. The decline in unionization follows on the heels of a mass exit of manufacturing plants and jobs to low-wage countries, which through trade liberalization, can now supply OECD markets directly. In today's bargaining environment, wage demands are typically outweighed by concerns for job and pension security. Job losses in unionized plants have typically exceeded losses in non-unionized plants in most OECD countries.

Union membership in the United States now covers only 10 percent of workers, half the coverage from the early 1980s, as 28 states have passed right-to-work legislation that enables workers in unionized plants to opt out of paying union dues, hence undercutting unions' ability to finance themselves. Even in the OECD countries that traditionally had the highest rates of unionization, a steadily declining share of the work force has been organized. For example, union membership in the United Kingdom fell from 30 percent in 1999 to 25 percent by 2013, while in Germany, union membership fell from 25 percent to less than 20 percent during the same period (Milanovic 2016, 105). For the most part, the decline in trade union density has been concentrated in the private sector, whereas union membership in the public sector, in particular with regard to the provision of health and education services, has remained much stronger.

Less Redistributive Role for the Tax and Transfer System

Most economists since David Ricardo first postulated the theory of comparative advantage would argue that there are net welfare benefits accruing from free trade, potentially making everyone better off. While economists have long recognized that free trade could displace workers in uncompetitive sectors, in theory at least, the negative impact of free trade on displaced workers could be mitigated or offset entirely by the government intervening through the tax and transfer system, which could redistribute income from economic winners to economic losers.

But in practice, there is scant evidence that there has been any concerted effort to do so. Instead, the distributional role of the tax and transfer system in most OECD economies has been sharply reduced, just as their labour forces became vulnerable to unprecedented displacement by imports from cheap labour markets abroad.

The marked decline in the progressivity of the tax and transfer system is not coincidental to global trade liberalization. With the free movement of goods and capital across national borders, countries are under continual pressure to keep their tax rates, as well as labour and environmental regulations, closely aligned with those of their competitors, lest they induce an even greater movement of jobs and production from their economies. For example, government-mandated increases in the minimum wage are often condemned for incenting businesses to leave to other more wage-friendly jurisdictions.

The dismantling of the so-called welfare state beginning in the Ronald Reagan and Margaret Thatcher era has continued largely to the present day and has significantly impaired governments' ability to redistribute income through taxes and transfer payments. As the globalization of the economy allowed capital to become much more mobile, it has become over time much harder to tax. The same applies to the income of the richest strata of the population.

Reductions in top marginal tax rates and, more importantly, on corporate taxes have prevented the tax and transfer system from offsetting or even significantly mitigating the inequities created by free trade and globalization. For example, there is no material difference in the movement of Gini coefficients based on market income than the movement found among coefficients measuring after-tax income, and perversely, in some cases, greater inequality is evident on an after-tax basis (Milanovic 2017, 107).

In part, this reflects the downsizing of government and, with it, its ability to play the same redistributive role in the economy that it did in the past. It also represents pronounced shifts in government policies themselves that have favoured personal and corporate wealth, whose mobility has been greatly enhanced with financial market deregulation and trade liberalization. Hence, the tax and transfer systems that were so integral to reducing market-driven income inequality in the past no longer do so today, even when global trade liberalization has significantly increased inequality in market incomes.

The Canadian Case

To what extent have these stylized trends from globalization been evident in the Canadian economy? Successive federal governments have aggressively pursued free trade deals, claiming access to global markets is critical to produce high-quality jobs. Other than Germany, no other G7 economy is as dependent on trade and foreign markets as Canada. Exports account for 30 percent of the country's GDP.[4]

While Canada initially signed a free trade agreement with the its largest trading partner, the United States, in 1988, it was the subsequent NAFTA treaty, which included Mexico, and China's inclusion into the WTO that have opened the door to many of globalization's economic traits discussed earlier. The inclusion of Mexico into the North American free trade zone provided a convenient low-wage jurisdiction to move supply chains to, and one that was much closer to the large US domestic market than offshore labour markets in Asia. And while China's inclusion into the WTO did not in itself signal tariff reduction against its imports, it nevertheless gave it international legal recourse against efforts by other countries to restrict its imports. That legal protection in turn encouraged a massive movement of investment and production to its borders as companies from around the world sought access to its vast cheap labour force.

In addition, Canada has entered into a raft of bilateral free trade agreements, including ones with Israel (1997), Chile (1997), Costa Rica (2002), Colombia (2008), Peru (2009), Jordan (2009), Panama (2010) and South Korea (2014). Canada also has entered into the Comprehensive Economic and Trade Agreement with the European Union, which is scheduled to come into effect this year, and is joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which is replacing the Trans-Pacific Partnership Agreement, from which US President Donald Trump exited shortly after taking office. In addition, the Government of Canada is currently considering an offer from China to begin negotiating a bilateral free trade agreement between the two countries.

4 Statistics Canada, CANSIM Table 380-0064, Gross domestic product, expenditure-based.

Increasing Inequality in the Distribution of Canadian Income

While not nearly as pronounced as in either the case of the United States or the United Kingdom, inequality has been rising steadily in the Canadian economy over the last three and half decades. Canada's Gini coefficient rose from 0.282 in the late-1980s to 0.314 by 2015 (using adjusted after-tax income), following a trend toward rising inequality prevalent throughout almost all OECD economies. While Canada's Gini coefficient is less than that of the United Kingdom or the United States, the two OECD countries with the highest coefficients, it nevertheless ranks only 12 out of 17 among peer countries in that group for income equality.[5]

Contrary to the claims of successive Canadian federal governments of both Conservative and Liberal stripes that free trade agreements promote the creation of middle-class jobs for Canadians, the empirical evidence suggests the opposite has been the case. The quality of new jobs has fallen steadily over the last two decades and virtually all new jobs created in the economy have been in the lower-paying service sector. While global trade liberalization can hardly be the culprit behind the lack of real wage growth in services, since the sector is the most insulated from direct low-wage-import competition from abroad, trade liberalization's devastating impact on job creation in the goods-producing industry has forced an ever-increasing share of the labour force to be employed by the much lower paying service sector.

Income Gains for Top Quintile, Real Household Incomes Stagnate for Most Middle-class Canadians

The lack of job creation in the goods sector and no real wage gains in the service sector has resulted in real income stagnation for the majority of Canadian households since the 1990s (see Figure 1). Yet during the same time period, the top 20 percent of Canadian households have seen their real incomes grow by almost 40 percent. (Even more impressive gains were recorded by the country's top one percent and top five percent of income earners.) That compares to virtually no gains in real incomes for the third and fourth quintiles, broadly representing what might be considered the country's middle class. This finding mimics similar trends found in the United States, United Kingdom and among most other OECD countries.

Tax and Transfer System Has Exacerbated Inequality in the Canadian Economy

To what extent has the tax and transfer system mitigated the trend toward increasing income inequality in Canada? Comparing trends in market income with after-tax income yields some startling results. Far from mitigating market income inequality, it would appear that the net effect of the tax and transfer system in Canada has been to exacerbate inequality. For example, average real income for the top 20 percent of Canadian households has risen faster on an after-tax basis, 44 percent, than on a market basis (pre-tax and not including government transfer payments), 38 percent, indicating a diminishing tax burden on the richest strata of the Canadian population between 1994 and 2016. In fact, it is not until we get to the third and fourth quintiles that growth in market income and after-tax income converge, indicating no lessening over time of the tax burden on what is commonly considered to be Canada's diminishing middle class.[6]

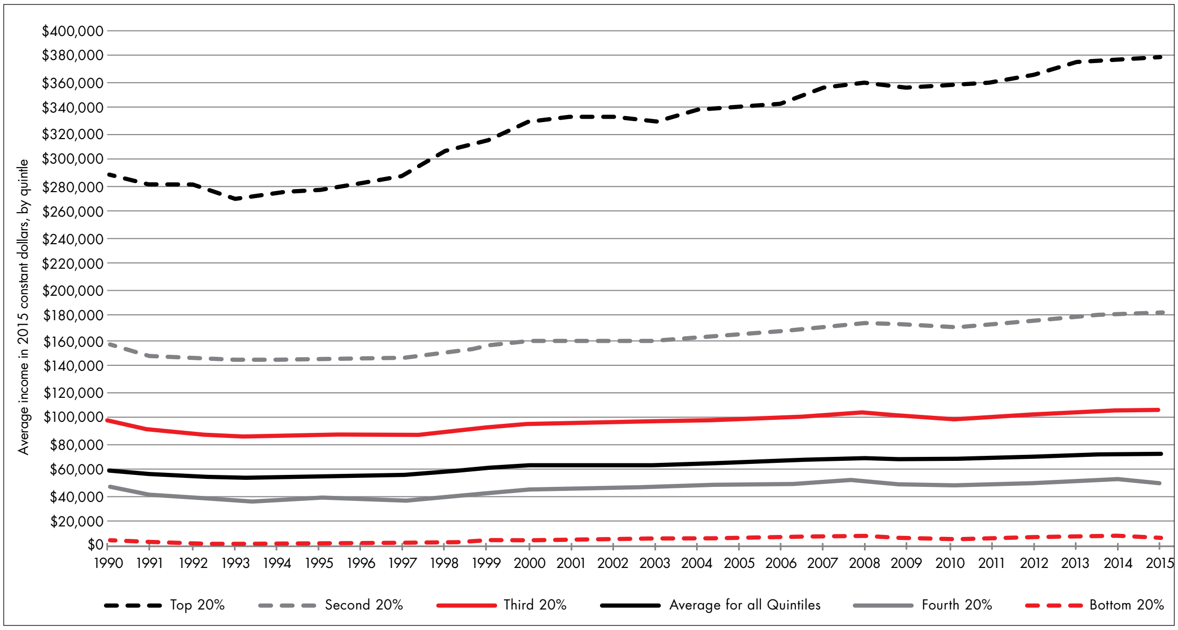
As in the case of most other OECD economies, a shrinking middle class has been coincident with a rising share of the top five percent's income share. For example, the share of the top five percent rose from 14 percent in the early 1980s to 16 percent by 2010 and has continued to rise since then. While nowhere near as steep a rise as in the United States, where the top five percent share rose from 15 percent to 20 percent during this period, the increasing income share held by the wealthiest five percent of the population held virtually across the board in all OECD economies, with the largest increases occurring in the United Kingdom and the United States (Milanovic 2016, 195-96), which also posted the largest increases in their Gini coefficients.

Aside from a growing income share at the very top, very modest income gains for most Canadian households was a major contributor to growing income inequality in the Canadian economy. Two factors stand out in explaining income stagnation for Canadian households. The first is the disappearance of jobs in high-paying sectors such as manufacturing, where trade impacts have been the greatest and the concomitant shift in employment to lower-paying

5 See www.conferenceboard.ca/hcp/Details/society/income-inequality.aspx.

6 See www5.statcan.gc.ca/cansim/a26?lang=eng&id=2060031.

Figure 1: Changes in Real Household Income by Income Group, 1990–2015



Data source: Statistics Canada, CANSIM Table 206-0031, Upper income limit, income share and average of market, total and after-tax income by economic family type and income decile, Canada and provinces.

service jobs. The second is the lack of wage growth itself, which has provided little if any gains after inflation, even though the latter was remarkably low during most of the period. With annual consumer price index inflation averaging less than two percent during the 1994–2016 period,[7] the main culprit behind stagnant real incomes lies squarely with anemic nominal wage growth that seems to have become a hallmark of today's globalized economy.

No Growth in Goods Employment in Over a Decade and a Half

As a result of the proliferation of global supply chains rooted in low-wage countries, employment in Canada, as elsewhere in the OECD, has steadily shifted from goods-producing industries to services. As the sector of the economy most exposed to import competition, employment in the goods sector has borne the brunt of the move to global supply chains. Over the last 17 years, there has been no net job creation in the goods sector of the Canadian economy, leaving current employment levels in the sector no higher than they were at the turn of the century (see Figure 2). As a share of total employment, jobs in the goods sector have fallen from 26 percent to 21 percent, the lowest level over the entire postwar era. Service employment, on the other hand, has grown steadily and its share of employment is at an all-time high.[8]

The shift in employment from goods to services has occurred over a period when trade barriers against virtually all non-agricultural goods-producing industries from textiles to autos have been either eliminated entirely or dramatically reduced.

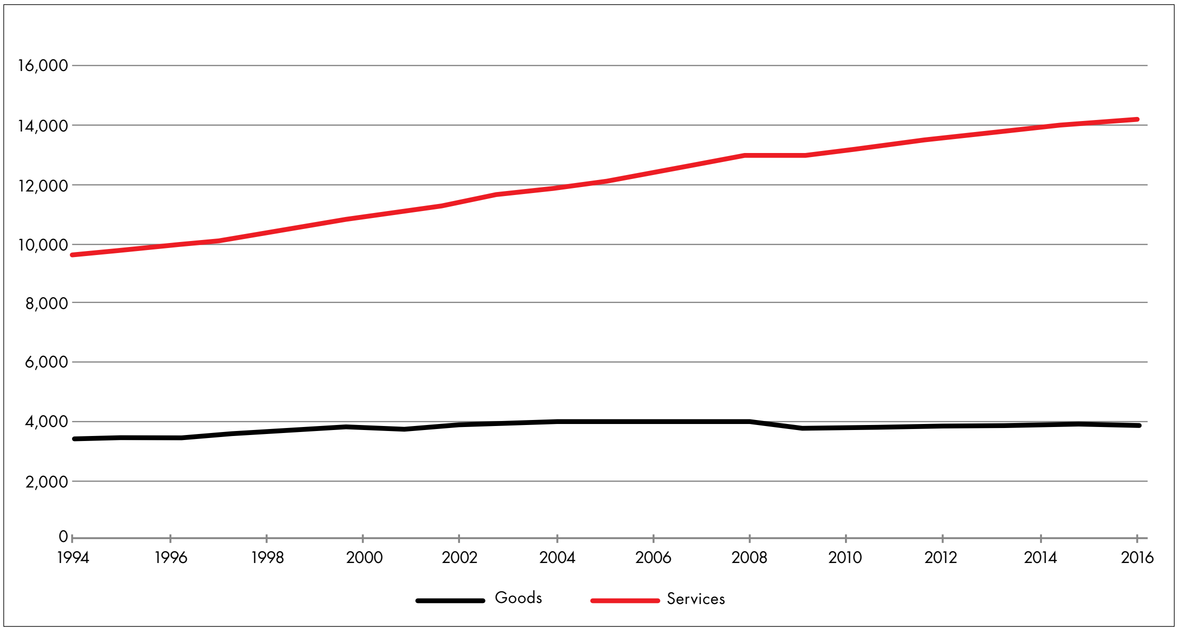
Within the goods sector, there has been a sharp decline in manufacturing payrolls. Like other G7 economies, Canada has seen its share of global manufacturing output cut in half over the last four decades. Factory payrolls, as elsewhere in the OECD, have been the primary casualty. While the decline in manufacturing employment in Canada did not begin until a good decade after it began in both the US and UK economies, it has fallen precipitously since 2000 (see Figure 3). The factory sector has lost 600,000 jobs, more than one-quarter of the industrial workforce in the country at the turn of the century, with the majority of job loses concentrated in Ontario, the country's industrial heartland.

As a share of employment, manufacturing jobs have fallen from 15 percent in 2000 to nine percent in

7 Statistics Canada, CANSIM Table 326-0020, Consumer Price Index.

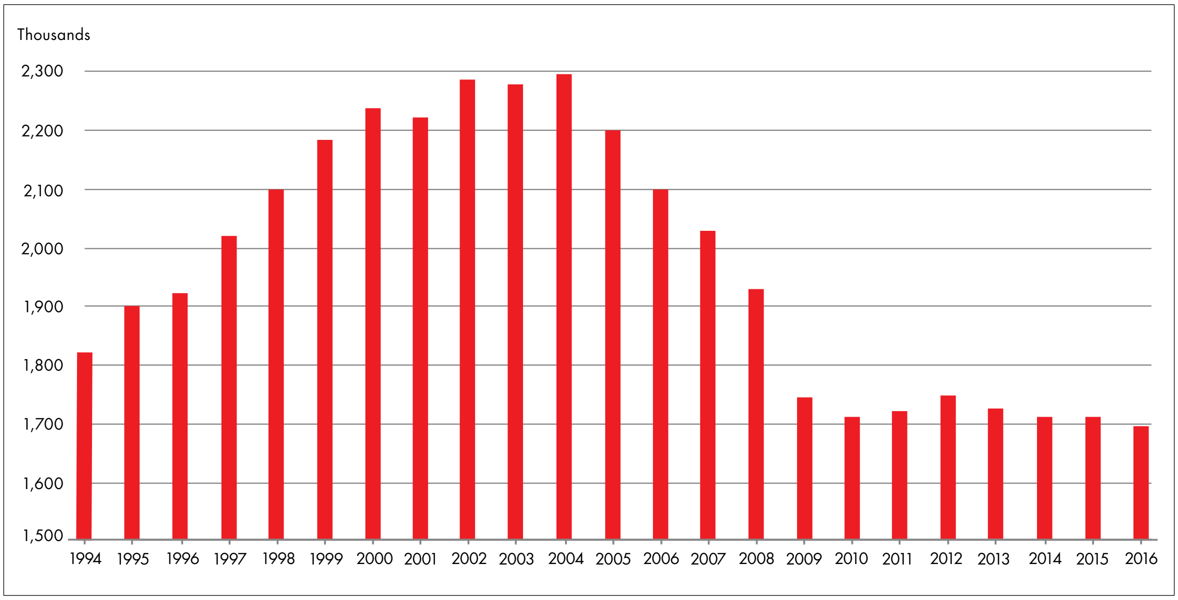
8 Statistics Canada, CANSIM Table 282-0008, Labour Force Survey estimates by North American Industry Classification System.

Figure 2: Employment in the Goods Sector and Service Sector, 1994–2016



Data source: Statistics Canada, CANSIM Table 282-0008, Labour Force Survey estimates by North American Industry Classification System.

Figure 3: Manufacturing Employment in Canada



Data source: Ibid.

2016.[9] Employment in the resource sector has also fallen. The only significant source of job creation in the entire goods sector of the economy has been in construction, which, being tied to the strength of the national housing market, is in the non-tradeable segment of the economy, and hence not directly impacted by competition from imports.

All of the employment gains, some three million jobs since 1994, have come from the lower-paying service sector. As a share of employment, goods sector employment has fallen from 26 percent to 21 percent during the period.[10] During the same period, employment in service industries has increased by more than three million jobs, increasing its share of total employment in the Canadian economy to almost 80 percent.

The Goods Sector: A Shrinking Slice of the Economy

It is frequently argued that job losses in manufacturing and the lack of job creation in the goods sector of the economy in general are primarily driven by the accelerated pace of labour-saving technological change in the form of robotics and other types of advanced automation. This trend is widely forecast to accelerate with the development and implementation of new artificial intelligence technologies and is expected to threaten to further reduce employment in the sector.

While, unquestionably, productivity gains driven by technological change have reduced, and will continue to reduce, the employment footprint in the goods sector, it is important nevertheless to recognize that there has also been a relative reduction in goods output in the economy, largely due to the systemic outsourcing of production to lower-wage jurisdictions as a result of the very significant reduction in trade barriers over the last several decades. The share of goods production in GDP has declined steadily over the last two decades, dropping from 35 percent in 1997 to 29 percent last year.[11]

The impact of outsourcing from cheap labour markets has been particularly evident in the Canadian auto and parts industries, the country's largest manufacturing sector, where employment has shrunk by about 25 percent over the last decade, while low-wage Mexican employment in the sector has more than quadrupled during the same period to more than 900,000 workers.[12] Hence, even in the absence of labour-saving technological change, the locational shift in where goods are produced would have still, on its own, have had a significant adverse impact on goods employment in Canada.

No Real Wage Gains in the Service Sector since 2000

With hourly compensation rates typically between 25 and 30 percent higher than in services,[13] the shift in the composition of employment has in itself had a very significant impact on the lack of wage growth in the economy. While the economy has been able to replace lost goods-sector jobs with service jobs, the new jobs created have typically been much lower paying than the jobs lost in the goods sector that they have replaced. Service sector employment has also carried a much higher percentage of part-time jobs. Hence, the change in the composition of employment between goods sector jobs and service sector jobs is a powerful force in holding aggregate wage growth in the economy in check.

This is all the more so since real wages in the service sector, the source of all job creation in the economy, have not grown in almost two decades (see Figure 4). The only sector that has seen any real wage growth has been in the goods sector, where employment has been stagnant for almost two decades. Even there, real wages remained flat for the first decade of the period before rising between 2005 and 2010, largely as a result of strong wage gains in the resource sector driven by the massive expansion of production from the Alberta oil sands and the associated infrastructure and development of the region. Not only did that drive up the price of labour directly involved in oil sands production, but also the price of labour nationally, as workers were drawn from all over Canada (and indeed the world) to meet the enormous staffing needs associated with the oil sands' massive expansion. However, since the collapse in oil prices in 2014 and the subsequent huge contraction in capital spending in the sector, real wages in the goods sector have once again stalled over the last three

9 Ibid.

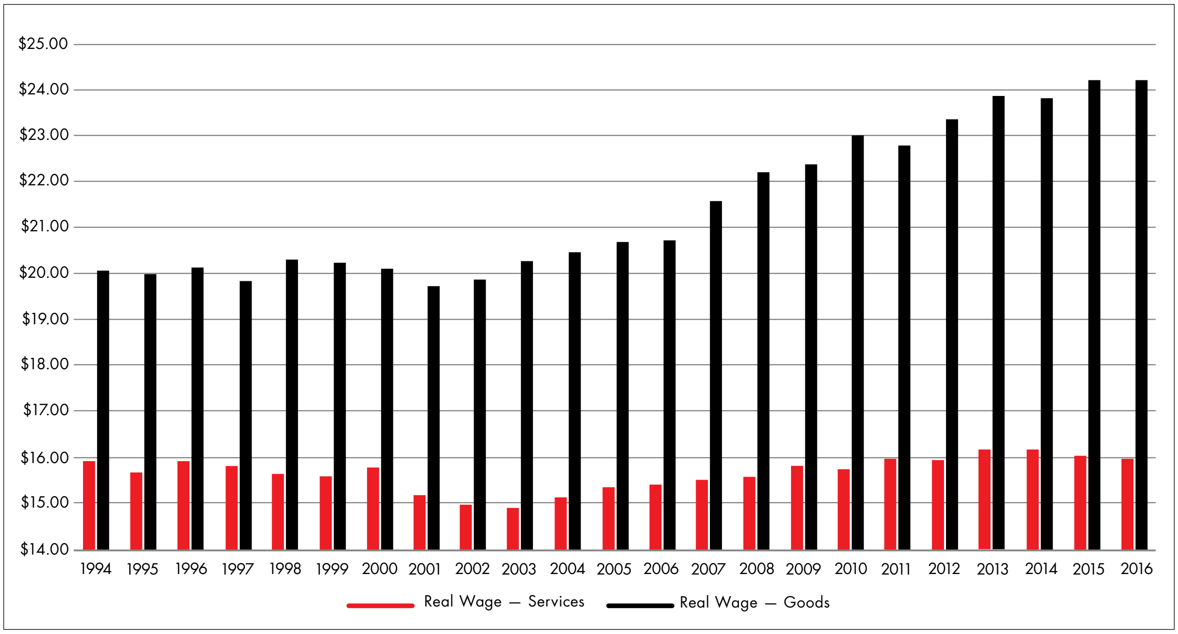
10 Ibid.

11 Statistics Canada, CANSIM Table 379-0031, Gross domestic product by North American Industry Classification.

12 See, for example, Rubin (2017).

13 For a comparison of hourly compensation rates between jobs in the goods sector and those in service industries, see Statistics Canada, CANSIM Table 282-0008, Labour Force Survey estimates by North American Industry Classification System.

Figure 4: Real Wages in the Goods and Services Sectors



Data source: Statistics Canada CANSIM Table 281-0055, Survey of Employment, Payrolls and Hours 1990–2000; CANSIM Table 281-0030, Survey of Employment, Payrolls and Hours 2001–2016; CANSIM Table 326-0020, Consumer Price Index.

years, continuing a trend that was already firmly in place prior to the resource boom in the oil sands.

At the same time, there has been a discernable shift from full-time to part-time employment, with the latter steadily rising as a share of total employment. In some periods, for example between September 2015 and October 2016, part-time jobs accounted for as much as 90 percent of total employment gains in the economy (Tal 2016).

In turn, the growth of part-time employment has coincided with a marked shift to low-paying jobs. Not only has this impacted average wages, but it has led to a growing share of workers who are paid less than the average wage (ibid.). By 2015, more than 60 percent of all workers were making below the average wage. Moreover, part-time employment in that year was the highest in over two decades, and among prime-age males (25 to 54), part-time employment was the highest since 1980 (*The Globe and Mail* 2017, A10).

The lack of wage growth in the Canadian economy is all the more striking in that it has occurred in the face of extremely tight labour market conditions. Despite the lack of job creation in the goods side of the economy, overall employment growth, both before and after the great recession, has been substantial, resulting in historically low unemployment rates during most of the period. For example, even though the national unemployment rate is currently at its lowest level since 1976,[14] wage pressures are largely absent in the Canadian economy, mimicking the docile wage behaviour in most OECD economies today.

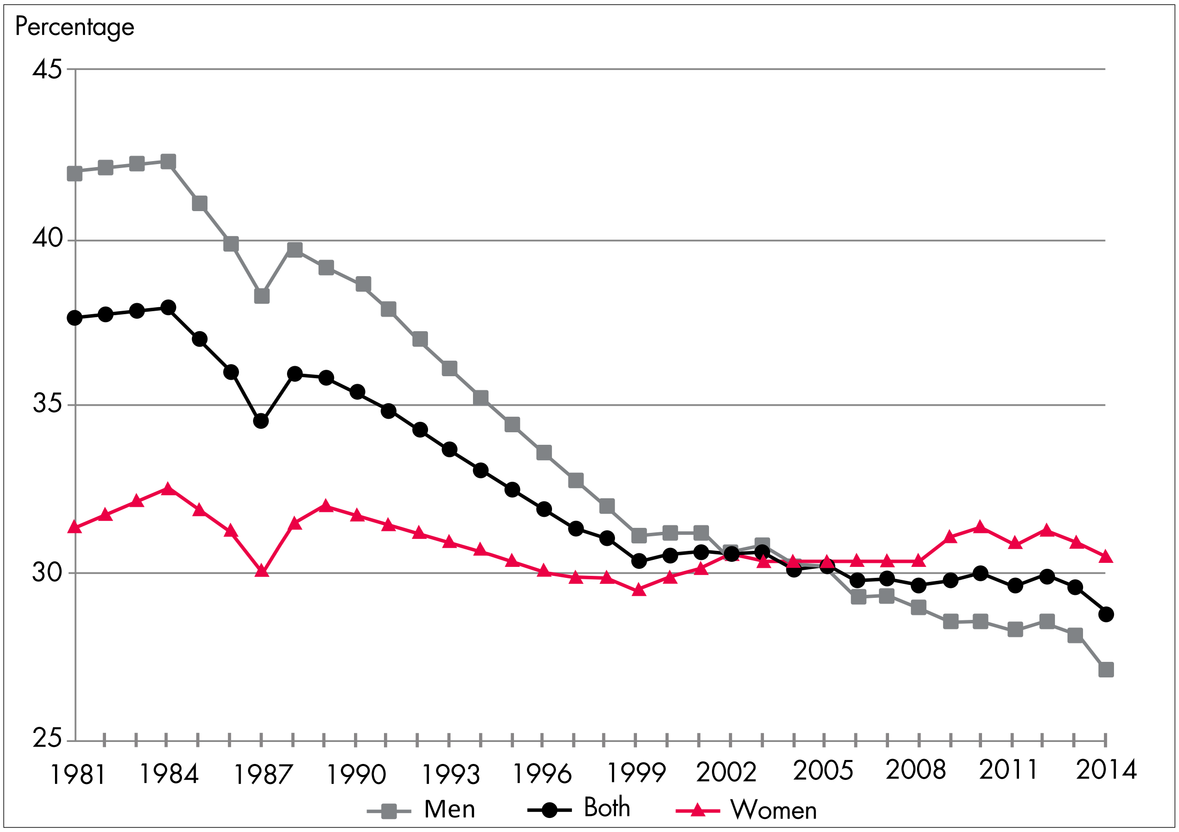
The breakdown of the traditional Phillips-curve relationship between the rate of wage increases and the unemployment rate is symptomatic of the broad displacement of workers in the goods sector and the loss of effective bargaining power that such workers have in today's economic environment. Job security has replaced wage gains as the principal objective of labour in collective bargaining, while collective bargaining itself now covers a much smaller fraction of the workforce than in the past.

Shrinking Union Membership and the Declining Role of Collective Bargaining

Unionized jobs typically pay a wage premium and hence are generally considered to be of higher quality. The shrinking base of union membership in OECD countries has been widely seen as a contributing

14 Statistics Canada, CANSIM Table 282-0087, Labour Force Survey.

Figure 5: Unionization Rates of Employed Individuals aged 17–64, 1981–2014



Data source: Statistics Canada, www.statcan.gc.ca/pub/11-630-x/11-630-x2015005-eng.htm.

factor to recent wage stagnation. Canada is no exception, with union membership as a percentage of the total workforce declining steadily over the last three decades. While union membership as a percentage of the labour force is roughly three times more in Canada than in the United States, membership has nevertheless declined from around 37 percent in 1980 to just 30 percent today.[15]

The decline among male workers, however, is far more pronounced, since they tend to be concentrated in the very goods-producing industries where imports from low-wage countries have taken their greatest toll on jobs. Union membership among male workers has dropped from more than 40 percent to less than 30 percent during the same time period (see Figure 5). In manufacturing, it has dropped to barely one-quarter of the workforce, while job losses in unionized plants have been more than double the job losses in non-unionized ones (Bernard 2009).

In marked contrast, union membership among the female labour force in Canada has remained relatively robust, with a current share of the labour force no less organized today than in 1981. As elsewhere in OECD countries, female union membership is heavily concentrated in the public sector, and most prevalent among health and education workers.

Huge Loses in the Oil Sands Stymie Shift to Profits

One trait of global trade liberalization not evident in the Canadian economy is with regard to factor income shares, and in this respect Canada is different from most of its OECD peers. While Canadian wages have been as stagnant as elsewhere in OECD labour markets, profits, at least in the last decade, do not seem to have been the primary beneficiary. The shift in factor incomes from labour to capital seen elsewhere in developed economies is not in evidence in Canada after the recession. While the profit share in Canada rose steadily from 1994 to 2008

15 See www.statcan.gc.ca/pub/11-630-x/11-630-x2015005-eng.htm.

from 25.6 percent to 33.2 percent,[16] it plummeted during the recession and has failed to recover. The explanation lies with the huge profit declines in the oil sector following the collapse in oil prices and, to a lesser extent, losses in the mining sector, which are also tied to weak or falling commodity prices.[17] It remains to be seen how significant a role commodity prices, and oil prices in particular, will play in limiting what otherwise should be a steadily rising profit share, as was the case up to the last recession.

Policy Implications

While it is claimed by successive Canadian federal governments of both Conservative and Liberal stripes that free trade agreements promote the creation of middle-class jobs, the empirical evidence suggests the opposite has been the case. The quality of new jobs has fallen steadily over the last several decades of unprecedented trade liberalization with no net job creation in the goods sector of the economy since 2000. All of the three million net jobs created since then have been in the service sector where real wages have not grown in almost two decades. At the same time, the economic gains from globalization have accrued mostly to the top two deciles of the Canadian population, which has experienced by far the largest income gains, almost three times the average. The country's Gini coefficient similarly points to increasing inequality in the national distribution of income. Lastly, inequality seems to have increased more on an after-tax basis, pointing to a lessening tax burden on the wealthiest Canadians, and a failure of the tax and transfer system to redistribute the gains from free trade to those most adversely affected by it.

Further trade liberalization, either in the form of a renegotiated NAFTA or new free trade agreements like the one sought by China or the recently negotiated CPTPP, will continue to hollow out production and employment in goods industries in the Canadian economy and act as a brake on potential wage gains for a growing number of Canadian workers. Both the Automotive Parts Manufacturer's Association and Unifor (the union representing auto and parts workers in Canada) have already condemned the nascent CPTPP agreement and claim it will inevitably lead to further job losses and plant closures in Canada's most important manufacturing industry (Blanchfield 2018).

While the economic gains from free trade deals and other forms of global trade liberalization may continue to support overall economic growth, the very skewed distribution of those gains is likely to see already rising income inequality increase, with the bulk of Canadian workers experiencing little if any growth in their real incomes.

To avert these trends, the government must either take a much larger role in redistributing the economic gains from global trade, or seek — as its largest trading partner, the United States, is doing — more balanced and reciprocal trade agreements. As more workers in OECD countries become marginalized, there is growing discussion of the need for a minimum guaranteed income. Yet the fiscal capacity to provide one is lacking in most countries, and on a net basis, the tax and transfer system in recent years has not only failed to reduce income inequalities but in many cases, including Canada, has exacerbated them.

A key problem faced by governments who wish to better redistribute the gains from trade liberalization is the very mobility of production and capital that free trade agreements facilitate. Even modest measures aimed at redistributing income, such as raising minimum wages, raising top marginal tax rates or raising corporate tax rates, are typically met with threats to move production and jobs to more business-friendly jurisdictions.

If the tax and transfer system cannot redistribute the gains from free trade, at least in part because of the threat of triggering economic dislocation, then trade policy itself must seek remedies. Guarantees relating to the location of production and employment should become critical in the renegotiation of existing trade agreements and the possible negotiation of new ones. To what extent these safeguards can be reconciled with the rules and regulations of current trade agreements remains to be seen. But without accommodation of those concerns, the pursuit of further free trade agreements and the ever-greater globalization of the economy will be increasingly challenged by those left behind.

16 Statistics Canada, CANSIM Table 380-0063, Gross domestic product, income-based.

17 Statistics Canada, CANSIM Table 187-0002.

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