CURRENT ANALYSIS
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The Decline in Manufacturing's Share of Total Canadian Output — A Source of Concern?

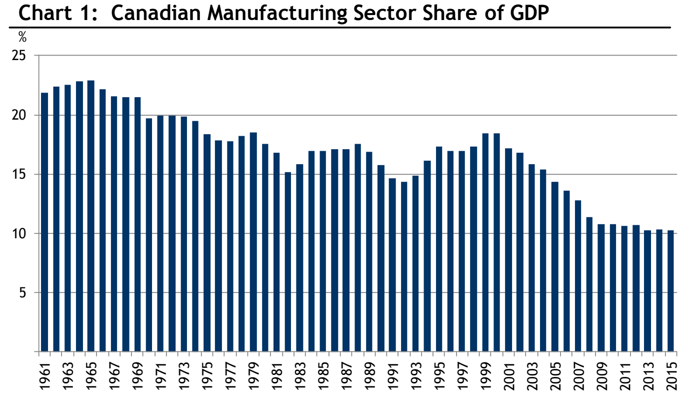
The manufacturing sector remains (and will remain) an integral component of the Canadian economy even though its direct share of economic output has declined substantially over time. Manufacturing currently directly accounts for about 10% of Canadian GDP, down from close to 20% in the year 2000 and as high as 30% in the early 1950s. The reason for the sector's decline in relative importance is often misunderstood as having occurred because Canadian companies have moved production offshore, in particular to countries with lower labour costs; however, other factors have also long been expected to contribute to a smaller (relative) manufacturing sector. For one, productivity growth has been much stronger in the manufacturing sector than in other industries. As a result, less 'effort' (in terms of number of hours worked) is needed to produce a given amount of manufactured goods. That boosts income levels and also frees up a larger proportion of the economy's workers to produce other goods or services. At the same time, it has been argued that higher income levels lead to greater propensity to purchase services rather than goods. More than half of Canadian consumer spending is on services, for example, up from 40% in the 1960s. Taken together, those two forces (ie. increased efficiency in goods production alongside rising relative demand for services as incomes increase) provide a strong reason to expect that the manufacturing sector would be declining as a share of economic output, even without any net shift in activity to a foreign producer.

The distinction is increasingly important in the current environment given increasing anti-trade rhetoric, most recently and importantly for Canada in the aftermath of November's U.S. election. Often, the intent of trade restrictions is to 'bring back jobs and production' to the domestic economy. If, however, the 'cause' of a shrinking manufacturing sector is not globalization, then trying to reverse globalization will not help and indeed would very likely do more harm than good.

The impact of short-run 'competitiveness' factors

To be sure, the Canadian manufacturing sector has also been sensitive to shorter-run fluctuations in competitiveness relative to other jurisdictions. Just as the weaker Canadian dollar and increased trade liberalization boosted manufacturing in the 1990s, a stronger currency combined with increased integration of emerging market economies in the global economy (including the entrance of China into the WTO) sapped some of the sector's strength. Nonetheless, those shorter-run factors do not explain the more persistent longer-run downtrend in the sector (Chart 1).

Chart 1: Canadian Manufacturing Sector Share of GDP



Source: Statistics Canada, RBC Economics Research

Canada is not alone in having a smaller relative manufacturing sector

One of the clearest pieces of evidence that the longer-run decline in the relative importance of the manufactur-

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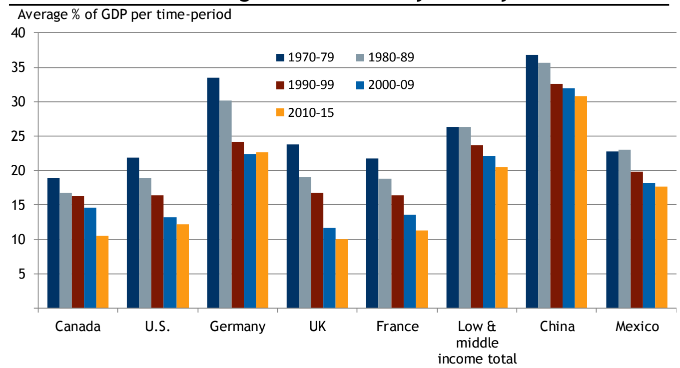
ing sector reflects factors other than ‘offshoring’ is that the Canadian decline is consistent with developments in other countries. As shown in Chart 2, most (if not all) advanced economies have seen substantial declines in the sector’s share of GDP over a longer time period. Perhaps more surprising, however, is that emerging market economies have also seen substantial declines including both China and Mexico. The share has been declining more slowly in the emerging than advanced economies but is nonetheless also on a downward long-run trajectory. According to World Bank estimates, the share of manufacturing output in GDP globally declined from 21% in 1995 to 15% in 2014. The share in Canada declined from 17% to 10% over that period and in the U.S. by a slightly smaller 5 percentage points to 12% from 17%.

Chart 2: Manufacturing's Share of GDP by Country



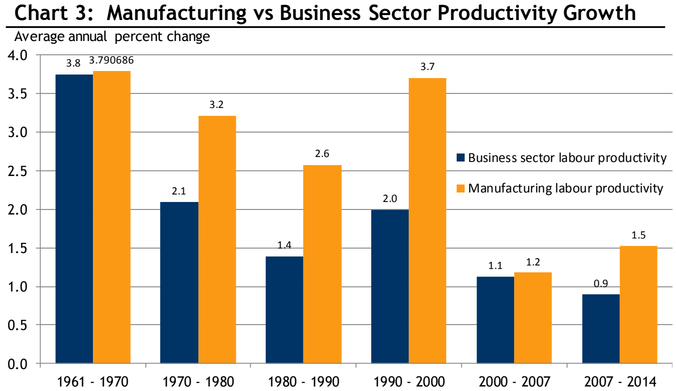
Source: Haver, RBC Economics Research

Off-shoring can explain a shift in the *share* of global manufacturing activity to one jurisdiction or another (and it is quite likely that manufacturing’s share of GDP in advanced economies, including Canada, has declined more quickly than in emerging markets due to competitive pressures.) That doesn’t, however, explain a broadly based decline in the size of the sector relative to GDP globally.

Does Canada actually produce less manufactured goods?

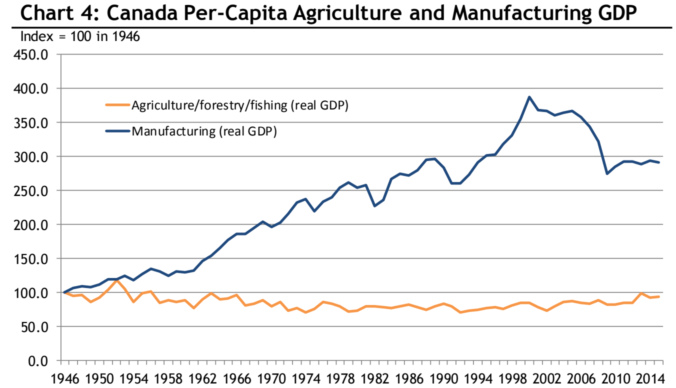
It is also worth noting that, although the manufacturing sector makes up a significantly smaller share of the Canadian economy than in the past, the amount of manufactured goods produced per person is still much higher than it used to be. Manufacturing sector productivity (ie. production per hour worked) growth easily outpaced that of the business sector as a whole, particularly in the 1970s, 1980s, and 1990s (Chart 3). Productivity growth in the sector has averaged 2.8% a year since 1961 compared to 1.9% for the business sector. The result is that increasingly fewer production resources (eg. workers) are needed to produce the same or more manufactured output (a trend often referred to as the automation of industrial output). That has allowed other sectors of the economy to grow in relative size while still producing, in an absolute sense, significantly more manufactured output. The level of manufacturing output per-person in Canada in 2015, for example, was still ~70% higher than in the 1960s (Chart 4) despite the sector’s share of total GDP shrinking by about half.

Chart 3: Manufacturing vs Business Sector Productivity Growth



Source: Statistics Canada, RBC Economics Research

Chart 4: Canada Per-Capita Agriculture and Manufacturing GDP



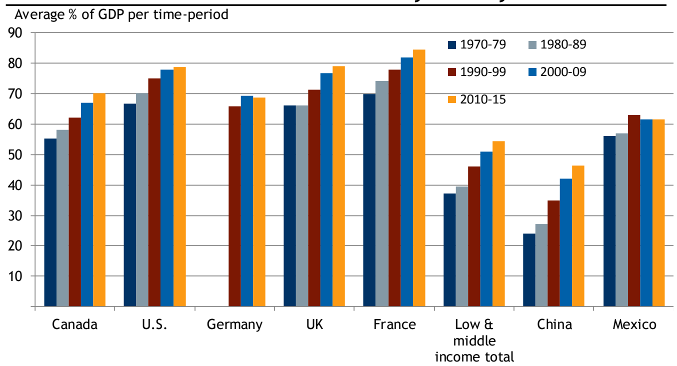
Source: Statistics Canada, RBC Economics Research

As Bank of Canada Governor Poloz noted in a recent speech, the downtrend in manufacturing’s share of GDP in Canada mirrors an earlier long-run decline in the agricultural sector. In the early 1920s, agricultural production accounted for almost 20% of total Canadian economic output and a third of total employment. Today, agriculture directly accounts for just 1½% of both output and jobs. Nonetheless, Canadian agricultural producers continue to produce more food, on balance, than is needed to feed domestic customers. Canadian agricultural output per person has been relatively steady over time (Chart 4) and Canada remains a significant net exporter of food products, amounting to almost $16 billion on net in 2015.

Is goods production 'better' than services production?

A decline in manufacturing's share of the economy implies that other sectors have become more important on a relative basis. To-date, both in Canada and abroad (including in emerging markets), that has generally meant a rise in the contribution from the service sector (Chart 5). The stigma often attached to the production of services as opposed to more tangible goods production is, in our view, misplaced. In terms of household incomes, there is no particular reason to think that a service-sector job is less 'valuable' than in the goods-producing sector. Median wages in the Canadian transportation & warehousing, professional services, finance, education services and healthcare, for example, are all as high or higher than the median wage in the manufacturing sector (Chart 6). Neither does services production mean providing services for only domestic customers. Services account for 17% of Canadian exports. That is up from about 12% 20 years ago with the bulk of the increase accounted for by exports of finance and professional services (which also pay above-average wages).

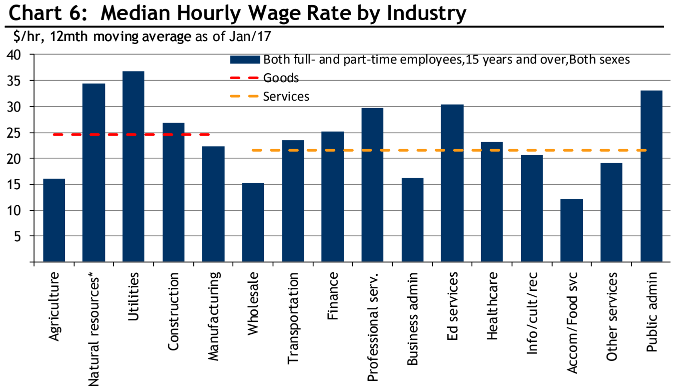
Chart 5: Service Sector's Share of GDP by Country



Source: Haver, RBC Economics Research

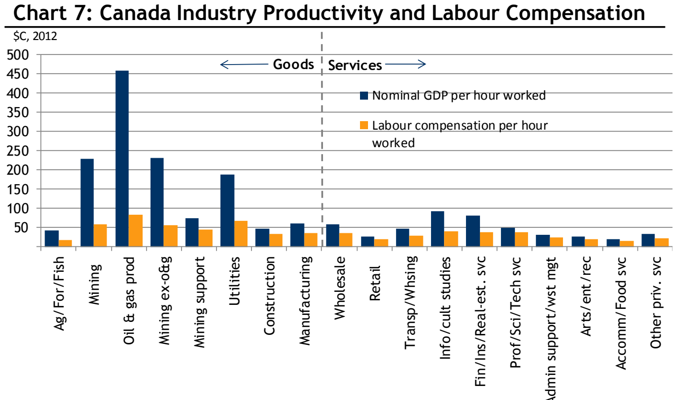
Certainly, the fact that the service sector has been increasing in relative importance for decades has not prevented growth in overall incomes with the level of real per-capita GDP 140% above its average in the 1960s. Of course the distribution of that income matters but there is not any obvious problem in terms of the size of the income 'pie' from having a larger services sector. Indeed, from an income distribution perspective, the relatively labour-intensive service sector also tends to pay a larger share of its earnings to workers. About 60% of the total value of service-sector production is ultimately paid to labour. That is similar to the manufacturing sector but well-above the 50% share in the goods-producing sector as a whole (Chart 7).

Chart 6: Median Hourly Wage Rate by Industry



Source: Statistics Canada, RBC Economics Research

Chart 7: Canada Industry Productivity and Labour Compensation



Source: Statistics Canada, RBC Economics Research

The cost of 'deindustrialization'

That is not to say that there are no costs associated with longer-run structural shifts in the economy. Although there are many jobs in the services sector that pay as much or more than the median manufacturing sector position, skills are not always transferrable and workers who have been, essentially, innovated out of a job can be left behind. That can have a pronounced effect on, not only individuals, but entire communities that have been heavily reliant on one particular industry. This was, and continues to be, a consequence of the earlier downtrend in agriculture's share of GDP in the 20th century that resulted in a dramatic transformation in agriculturedependent regions, for example in the rural communities of the Canadian Prairies.

Policymakers still need to take into account short-run competitiveness factors; however, it is also important to acknowledge and address longer-run trends that have more to do with structural demand and supply factors at the global level (over which Canada directly has little if any control). Rewards to education/experience (in terms of wages) tend to be higher in the services sector than in goods production. That argues both for support and retraining services for displaced workers as well as improving access to education to ensure that all future workers have access to the same future job opportunities. In an era of increasingly protectionist trade rhetoric both at home and abroad, it is worth remembering that the economy, both global and domestic, has adjusted to change before and can do so again. A more appropriate response to these longer-run challenges is to better identify where the economy is evolving, and ensure that segments of the population are not left behind, rather than trying to revert back to an economic model that no longer reflects underlying contemporary conditions.