

**CURRENT ANALYSIS**

February 2015

**Will lower oil prices provide a boost to Canadian manufacturers?**

The ongoing oil price shock has seen prices on a WTI basis drop from a recent quarterly high in the second quarter of 2014 of \$103/bbl to below \$45/bbl at the end of January. Prices have rebounded somewhat in recent weeks to levels slightly above \$50/bbl, and we expect there will be some further recovery over the second half of the year; however, even in 2016 our assumption is that WTI oil prices will average \$77/bbl, which is well-below the \$93/bbl and \$98/bbl averages in 2014 and 2013, respectively. The drop in prices and attendant cut-backs in production and investment in the sizeable oil and gas sector has raised concerns about a potential negative impact on the overall Canadian economy.

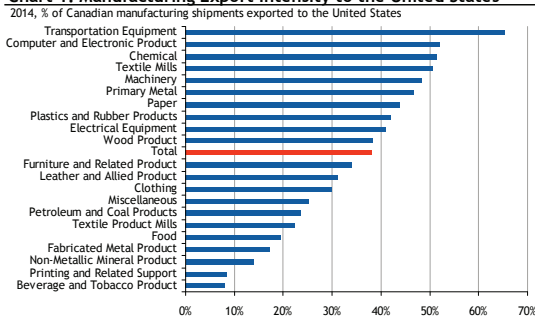
While the impact of lower oil prices on activity in the oil & gas sector is clearly negative, RBC Economics has made the point in previous commentaries that not all regions or sectors will be negatively impacted. Canadian consumers benefit from lower gasoline prices that free up household incomes to purchase other goods and services and help offset a potential negative impact on consumers' income arising from diminished terms-of-trade and the resulting drop to economy-wide purchasing power. The resulting boost to consumer demand helps businesses outside of the oil & gas sector which also benefit directly from lower energy costs. Moreover, our view is that the decline in oil prices also represents a clear net positive shock to our largest trading partner, the U.S. This is also the view of the Bank of Canada, which noted in the January 2015 *Monetary Policy Report* that a 45% drop in oil prices is expected to raise U.S. GDP by a full percentage point. Strengthening growth in Canada's largest trade partner, along with a weaker currency (much of which is also a result of lower oil prices), represents a potentially substantial support to Canadian exporters.

**Manufacturing industry well positioned to benefit**

Canadian manufacturers stand out as among the best-suited to benefit from the oil price shock. Data from Industry Canada suggest that close to 50% of Canadian manufacturing sales are exported, and about 80% of those exports are destined for the U.S. Chart 1 shows Canadian manufacturing export intensity (ratio of exports to sales) by manufacturing sub-industry. The largest U.S. export intensity is in the transportation equipment component, but a diverse set of other subsectors including textile mills, computer and electronic products, and primary metal manufacturing also count on the U.S. market for a large share of total sales. Although the benefit to exporters will be tempered to the extent their inputs need to be sourced from the U.S., a strengthening in the U.S. economy and a weaker Canadian dollar, could present a welcome reprieve for a sector that has struggled over the last decade and a half.

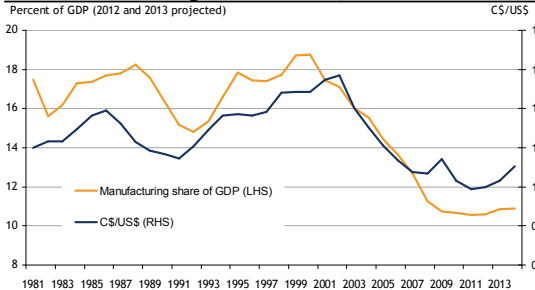
Despite Canadian manufacturers' exposure to the U.S. market, there has been little transmission of U.S. growth into gains for Canada's manufacturing sector since the turn of the century. This is likely the result of the sector's sensitivity to the Canadian dollar, which steadily appreciated relative to the U.S. dollar through the 2000s and eroded the competitiveness of Canadian manufacturers. Chart 2 illustrates the correlation of a strengthening dollar and a steadily declining manufacturing sector as a share of GDP through the 2000s. Canadian

**Chart 1: Manufacturing Export Intensity to the United States**



Source: Industry Canada, RBC Economics Research

**Chart 2: Manufacturing GDP Share and C\$**



Source: Statistics Canada, RBC Economics Research

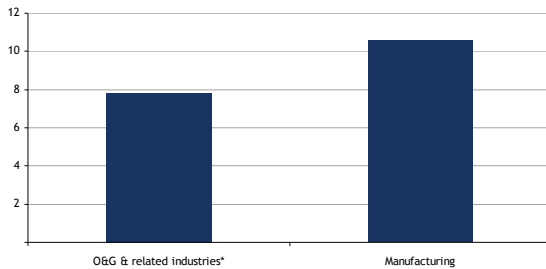
**Paul Ferley**  
 Assistant Chief Economist  
 (416) 974-7231  
 paul.ferley@rbc.com

**Nathan Janzen**  
 Economist  
 (416) 974-0579  
 nathan.janzen@rbc.com

**Gerard Walsh**  
 Economist  
 (416) 974-6525  
 gerard.walsh@rbc.com

**Chart 3: Share of GDP: Manufacturing and Oil & Gas**

% of GDP (based on 2011 input-output tables)



\*Includes oil & gas extraction, support activities for o&g extraction, oil & gas engineering construction, petroleum refineries, and crude oil pipeline transportation

Source: Statistics Canada, RBC Economics Research

exports have similarly lagged improving U.S. GDP growth during the recovery from the 2008/09 recession, a fact that, as we have [noted](#) in the past, has at least in part been due to a stronger Canadian dollar relative to past recovery periods. Recent declines in oil prices coupled with policy action from the Bank of Canada have caused substantial currency depreciation and are turning the dollar from a headwind to a tailwind for Canadian exporters and manufacturers.

### Despite a reduced share, manufacturing sector still important for Canada

Chart 2 shows how headwinds over the last decade and a half have reduced the manufacturing sector's footprint on the Canadian economy, which has raised doubts about how meaningful an offset the sector can provide to the almost certain weakness in the oil & gas extraction sector this year. We would note that, even with deterioration in recent decades, manufacturing output remains an important and sizeable contributor to the Canadian economy. Although manufacturing's share of GDP has declined to about 11% from closer to 20% in 2000, this is still larger than the 7.8% accounted for directly by oil & gas extraction and closely related industries (Chart 3).

### But can manufacturing respond?

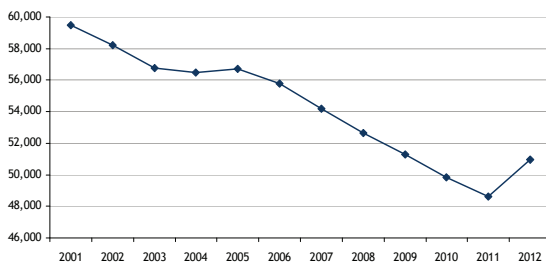
It has been argued that the 'hollowing out' of the manufacturing sector caused by years of underinvestment means that the sector may lack the capacity to respond to the normal drivers of activity in the form of increased U.S. demand and a weaker currency. This concern has in part resulted from earlier indications of firms exiting the manufacturing sector with the implied loss of production capacity inhibiting the normal boost to production that would ordinarily accompany rising demand.

Since 2000 there has been a steady decline in manufacturing firm numbers commensurate with declining output in the sector generally (Chart 4). However, this decline ended in 2012 with the number of manufacturing firms ticking up for the first time in 6 years. Preliminary data on business counts for 2013 and 2014 from Statistics Canada's Business Register are more mixed; however, that data source is also less reliable for making comparisons across time because of difficulties classifying businesses by industry and changes in methodology across survey periods. Data on firm entry and exit rates paint a similar picture to the business count data. Entry rates for manufacturing firms have been consistently below exit rates since 2000, but the latest data available point to a sharp pickup in entry rates to 7.2% in 2012 from 4.8% in 2011. Although this data is admittedly dated, the combination of strengthening U.S. demand and a weaker Canadian dollar which, on an annual average basis, has weakened for 4 consecutive years relative to the U.S. dollar provides reason to believe that the improvements observed in 2012 may have been the beginning of a more positive near-term trend.

The argument has also been made that capacity utilization in manufacturing is already getting back close to pre-recession levels despite a tepid recovery in output. This has led to concerns that manufacturers are permanently closing idle capacity and thereby stunting the sector's ability to meet rising demand. Our view is that these concerns are overstated because the lion's share of the recent upward pressure on the capacity utilization rate is concentrated in one sector: transportation equipment. Strengthening U.S. car sales, and to some extent reduced business investment in the Canadian motor vehicle sector in prior years, have resulted in record capacity utilization for this sub-sector. Controlling for the impact of the transportation sector, rates of capacity utilization in manufacturing as a whole remain below those typical of the pre-recession period (Chart 5).

**Chart 4: Manufacturing firm counts**

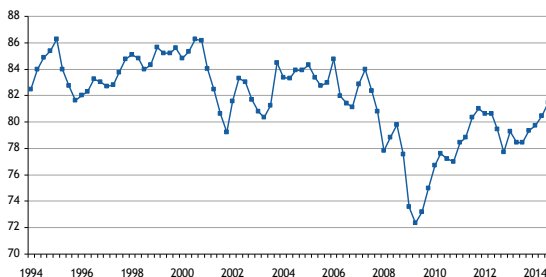
Longitudinal Employment Analysis Program, number of firms



Source: Statistics Canada, RBC Economics Research

**Chart 5: Manufacturing ex. Transportation Equipment Capacity Utilization**

Quarterly. Capacity utilization seasonally adjusted and approximated using GDP weights.



Source: Statistics Canada, RBC Economics Research

While we don't yet believe capacity constraints are binding on manufacturers, they may become so as production rises to meet demand. If history is any guide, firms will respond to mounting capacity constraints by boosting investment spending. Chart 6 shows the historical correspondence of investment and capacity utilization in manufacturing. Particularly noteworthy is the 1990s during which manufacturing capacity utilization rapidly rose as the economy recovered from recession and prompted stronger investment growth in subsequent years. Recently, both capacity utilization and investment spending have slowly increased and are approaching pre-recession levels. If strengthening demand causes firms to take up their slack capacity, it may stimulate investment spending.

**Already some signs of life**

The above discussion suggests that there remains capacity for many manufacturing sub-sectors to respond to rising demand from the U.S. The question remains as to whether export-oriented manufacturing firms will take advantage of the recent supportive developments. Our view is that they ultimately will and, on that score, more recent trends have suggested some reason for optimism. Exports, which have lagged growth in U.S. demand during the economic recovery, have been growing more quickly with solid gains in the second and third quarter offset by only a modest pullback in the fourth to leave Canadian exports at the end of 2014 more than 8% above their level a year ago.

Alongside rising exports, manufacturing production has shown signs of improvement. The manufacturing component of monthly GDP declined 1.9% in November; however, a rebound in manufacturing sale volumes is pointing to at least a partial rebound in December while earlier gains leave the measure still on pace to outpace growth in the broader economy in 2014 for just the third year since 2000, with the other two instances in 2010 and 2011 as activity in the sector bounced following an outsized drop in 2009 that was much larger than the decline in overall GDP recorded in that year (Chart 7). In the late 1990s, manufacturing growth was consistently stronger than GDP growth but consistently underperformed through the 2000s as the U.S. economy entered recession in 2001 and the Canadian dollar strengthened steadily through the rest of the decade.

Although increased production in the transportation sector, largely related to the rebound in the auto market following the recession, has led the way, gains have been relatively broadly-based by industry with most sub-sectors performing notably better in 2014 than their previous 10-year averages (Chart 8). Anecdotal reports are in line with the data. The Bank of Canada's Q4 Business Outlook Survey pointed to notable weakness in the oil & gas sector; however, comments on manufacturing were unambiguously positive, particularly for those firms that reportedly export significantly to the U.S. (see below)

**Quotes from the BoC Q4 Business Outlook Survey:**

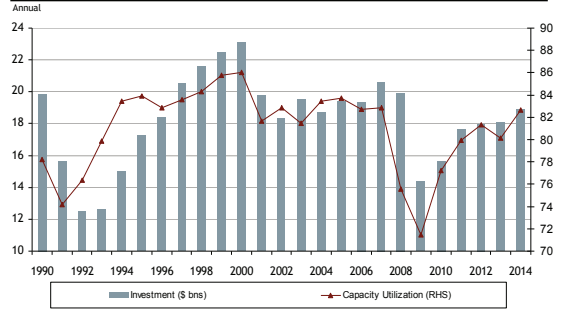
*"The winter Business Outlook Survey continues to provide signs of strengthening demand, especially among export-oriented firms and manufacturers."*

*"hiring intentions and investment plans are more robust for manufacturers than for firms in other sectors"*

*"Compared with recent surveys, reports of higher investment in machinery and equipment are more widespread in the manufacturing sector, and more projects are aimed at expanding production capacity and reducing costs."*

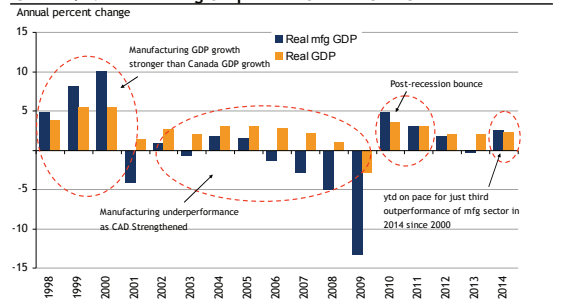
*"Capacity pressures are more prevalent among exporters and firms that reported improved sales activity over the past 12 months. Many of these businesses are planning to increase their investment and employment to address capacity constraints."*

**Chart 6: Manufacturing Capacity Utilization and Investment**



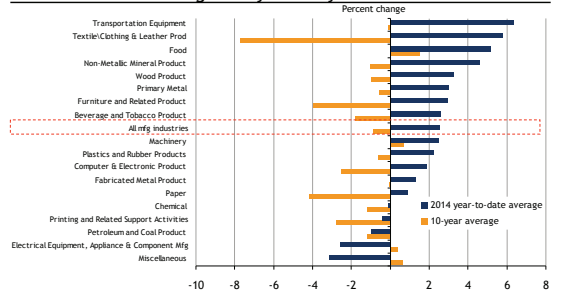
Source: Statistics Canada, RBC Economics Research

**Chart 7: Manufacturing Output and Canada GDP Growth**



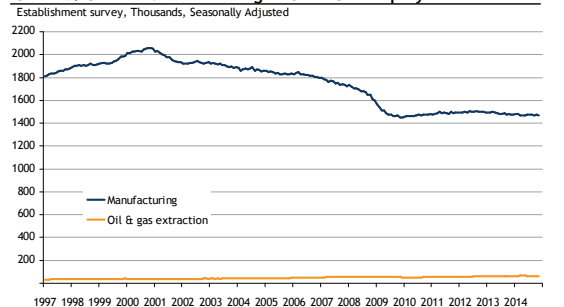
Source: Statistics Canada, RBC Economics Research

**Chart 8: Manufacturing GDP by Industry: 2014 Year-to-date**



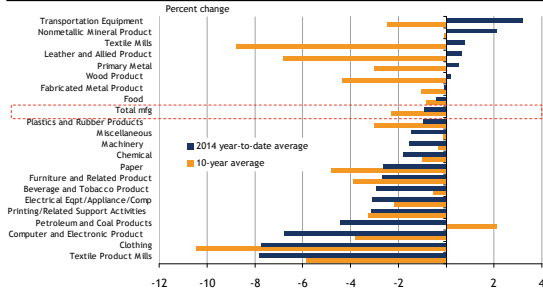
Source: Statistics Canada, RBC Economics Research

**Chart 9: Canada Manufacturing vs Oil & Gas Employment**



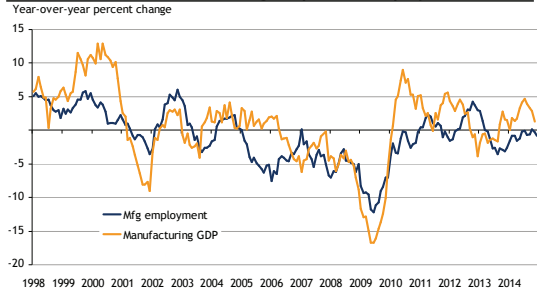
Source: Statistics Canada, RBC Economics Research

**Chart 10: Mfg Employment by Industry: 2014 Year-to-date**



Source: Statistics Canada, RBC Economics Research

**Chart 11: Canada Manufacturing Output and Employment**



Source: Statistics Canada, RBC Economics Research

To-date, growth in the sector has still been modest and largely accounted for by productivity increases. As a result, job growth remains a sore spot with employment headcount little changed from recession lows (Chart 9). With that said, the number of workers directly employed in the manufacturing sector still is significantly larger than those employed directly in oil & gas extraction. As well, looking at the industry breakdown, there have been some pockets of improvement in manufacturing employment recently (Chart 10). In general, the largest manufacturing subsectors have seen the best employment dynamics in 2014. For example, data through November suggest that jobs in transportation equipment manufacturing have grown 3.2% in 2014, consistent with mounting capacity constraints in that subcomponent. Chart 11 shows the historical correlation between manufacturing output and employment. Although Canadian employment data is notoriously volatile, stronger output eventually *should* result in stronger hiring in the manufacturing sector.

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