May 2012

Executive Summary

In the Shadow of the Boom:

How oilsands development is reshaping Canada's economy

by Nathan Lemphers and Dan Woynillowicz

Overview

In 1995, a national group of oil industry and government representatives set an ambitious goal: by 2020, they wanted to see Canada's oilsands producing between 800,000 and 1.2 million barrels of oil each day.[1] But less than 10 years later, Canada had already surpassed that goal[2] — and today, oilsands production is on track to reach nearly 3.5 million barrels per day by 2020.[3]

This rapid and unprecedented expansion of Canada's oilsands has come at a time when the negative environmental and climate impacts of oil and gas production and use are under intense global scrutiny. The federal government has indicated it sees promoting the ongoing expansion and export of Canadian oil and gas as a top priority,[4] and has taken steps to fundamentally weaken environmental oversight and protection to fast-track industry projects.

The polarizing rhetoric on both sides of the issue has made it difficult to have a reasonable, facts-based discussion about the pace and scale of oilsands expansion in Canada and how the rush to develop the oilsands is affecting Canada's economy. Yet that discussion is critically needed today.

Over the past decade the value of the Canadian dollar has appreciated steadily and dramatically relative to the U.S. dollar, climbing to US$1.10 in 2007 from a low of US$0.61 in 2002,[5] and

---

[1] National Oil Sands Task Force, *The Oil Sands: A New Energy Vision for Canada* (1995), 33.

[2] Between 1995 and 2004 Alberta's crude bitumen production increased from 482,000 barrels per day to 1.1 million barrels per day. Data was converted from cubic metres to barrels using a factor of 6.2929 barrels/ cubic metre. Source of 1995 data: Alberta Energy and Utilities Board, *Alberta's Reserves 2003 and Supply/Demand Outlook 2004-2013,* ST98-2004 – Graphs and Data – Section 2 Crude Bitumen. (2004). http://www.ercb.ca/docs/products/STs/st98-2004.pdf; Source of 2004 data: Alberta Energy and Utilities Board, *Alberta's Reserves 2004 and Supply/Demand Outlook 2005-2014* ST98-2005 (2005), 2-2. http://www.ercb.ca/docs/products/sts/st98-2005.pdf

[3] Alberta Energy Resources Conservation Board, *Alberta's Energy Reserves 2010 and Supply/Demand Outlook 2011-2020*, ST98-2011 (2011), Figure S3.8. http://www.ercb.ca/docs/products/STs/st98_current.pdf

[4] Stephen Harper, speech, World Economic Forum in Davos, Switzerland, January 26, 2012. http://www.pm.gc.ca/eng/media.asp?category=2&pageId=46&id=4606

[5] These represent the lowest and highest exchange rates during the period January 2000 through January 2012, as documented by the Bank of Canada. Source: http://www.bankofcanada.ca/rates/exchange/can-us-rate-lookup/

hovering around parity for the past year or so. While numerous factors affect the value of the Canadian dollar, its sharp rise over the past decade has closely followed trends in the price of resource commodities, especially oil.[6,7] The increasing correlation between oil prices and the Canadian dollar has led many to dub it a "petro-currency."

There are some benefits to having a stronger currency; for example, consumers are able to purchase foreign goods or travel to other countries for less, and Canadian companies can (if they choose) upgrade machinery and equipment from foreign suppliers more cheaply, thereby enhancing productivity. But a rising currency doesn't necessarily float all boats.

When the value of a country's currency is closely correlated with the value of a commodity, it can lead a country to contract what is often referred to as "Dutch disease." The term was coined by *The Economist* in 1977 to describe a phenomenon that occurred in the 1960's in the Netherlands, when the country discovered and began to aggressively develop offshore natural gas.[8] Dutch disease occurs when the real exchange rate of a country appreciates to the point where the country's manufactured goods become too expensive to export, ultimately leading to the decline or even demise of the manufacturing sector.[9] This decline has broader implications for the economy because, relative to the resource sector, the manufacturing sector tends to be more innovative and can develop technologies that spill over into other sectors.[10,11] A contraction in the manufacturing sector means fewer spillover benefits; if left unchecked, this could lead to lower rates of growth throughout the economy when the resource boom subsides.[12,13]

Compared to the Dutch experience in the 1970s, the current Canadian context is unique in many ways; therefore the simple label of Dutch disease fails to capture what is happening in the Canadian economy. Rather, it seems clear that Canada is undergoing changes, both positive and negative, that are unique to both the nature of its domestic economy and Canada's role in a shifting global economy. The result appears to be a uniquely Canadian strain of the Dutch disease that could be called "oilsands fever" — a strain that is beginning to create clear winners and losers in Canada's economy and could pose a significant risk to Canada's competitiveness in the emerging clean energy economy.

---

[6] Dinara Millington, Carlos Murillo, Zoey Walden and Jon Rozhon, *Canadian Oil Sands Supply Costs and Development Projects (2011-2045),* Study no. 128 (Canadian Energy Research Institute, 2012), 23.

[7] Statistics Canada, CANSIM Table 176-0064, Foreign exchange rates in Canadian dollars.

[8] "The Dutch Disease," *The Economist,* November 26, 1977, 82–83.

[9] Martin Lefebvre, *"Petrocurrency": Good or Bad for Canada's Economy?*, Economic Viewpoint (Desjardins, 2006), 9.
http://www.desjardins.com/en/a_propos/etudes_economiques/actualites/point_vue_economique/pve61011.pdf

[10] Philippe Bergevin, *Energy Resources: Boon or Curse for the Canadian?* prepared by Parliamentary Information and Research Service, PRB 05-86E (2006). http://www.parl.gc.ca/Content/LOP/researchpublications/prb0586-e.htm

[11] The recent increases in amounts of non-valued added natural resources (e.g. coal, oilsands, potash, lumber) exported from Canada limits the spillover effect from the resource sector on the Canadian economy.

[12] Mohammad Shakeri and Richard Gray, *Has Canada caught Dutch Disease?* Policy Brief #20 (Canadian Agricultural Innovation and Regulation Network, (2010), 3.

[13] Paul Krugman, "The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic," *Journal of Development Economics* 27 (1987).

Overall, Canada's economy has fared relatively well over the past decade, especially in light of the recent global recession. Between 2001 and 2010, Canada's total GDP grew by 1.7 per cent, with growth in 2010 at 3.3 per cent.[14] However, not all sectors of the Canadian economy have fared as well as the oilsands, and provincial fault lines have emerged, with the economic disparity creating tension among regions. The projected level of future oilsands development and the current efforts of the federal government to fast-track that development seem likely to exacerbate those tensions.

Since 2001 there has been a remarkable increase in Canada's exports from energy, industrial and agricultural sectors. This increase has masked a considerable drop in exports from the machinery and equipment, automotive and consumer goods and forestry sectors. The export of Canadian manufactured goods has been contracting due to a variety of factors, including the global shift of manufacturing to China, reduced U.S. demand and the high value of the loonie relative to the U.S. dollar. To cope, many manufacturing companies have begun to shift their focus to serving the resource sector, further contributing to an economy that is increasingly unbalanced and reliant on commodities known for their high price volatility.[15]

Outside Alberta, companies can have an incredibly difficult time attracting and retaining employees when oilsands production is booming. Those that don't have enough staff to complete their work will either lose business to outside competitors or shut their doors permanently.[16] Changes in employment in Canada further demonstrate the downward trend in the manufacturing sector. Compared to other sectors in the economy, employment in the manufacturing sector has not recovered from the 2008-09 recession.[17] Between 2004 and 2010, over 550,000 jobs were lost in the manufacturing sector, representing 3.2 per cent of all employed Canadians.[18,19] While not all these jobs losses are from the rising loonie and other jobs have been created elsewhere in the economy, it is the rate, scale and regionalization of job loss from the manufacturing sector that is particularly concerning.

In 2008, the OECD noted that oilsands development is "generating large regional disparities," and suggested that Canada's historic system of equalization among have and have-not provinces may be inadequate to address these disparities.[20] The decline in Canada's manufacturing sector

[14] Industry Canada, "GDP Canadian Economy," NAICS 11-91, *Canadian Industry Statistics*. http://www.ic.gc.ca/eic/site/cis-sic.nsf/eng/h_00013.html

[15] MRB Partners, *O Canada (Part I) and Uh-Oh Canada (Part II)* (2011), 16.

[16] Mark Carney, "Capitalizing on the Commodity Boom: the Role of Monetary Policy," speech, University of Calgary Haskayne School of Business, June 19, 2008. http://www.bankofcanada.ca/2008/06/speeches/capitalizing-commodity-boom-role-monetary-policy/

[17] OECD, *OECD Economic Surveys: Canada* (2010). http://www.oecd.org/document/56/0,3746,en_2649_34111_45925432_1_1_1_1,00.html

[18] Ibid.

[19] Statistics Canada, "Labour force characteristics." http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ10-eng.htm

[20] OECD, *OECD Economic Surveys: Canada* (2008), 109. Available at http://www.oecd.org/document/3/0,3746,en_2649_34111_40732867_1_1_1_1,00.html

affects residents of Ontario and Quebec most profoundly.[21] Meanwhile, Statistics Canada data shows the resource-based economies of Alberta, Saskatchewan and Newfoundland and Labrador have been growing over the last decade, relative to the economies of provinces in central Canada.[22] In other words, the commodity-rich provinces are increasing their dominance of Canadian exports and outperforming exports from the traditionally strong manufacturing base in central Canada.[23] While Canada is exploiting its comparative advantage with respect to natural resource extraction, the rate of change is causing significant challenges in central Canada — making it difficult for this region to adjust to incredibly rapid structural changes in the economy.

The question of who wins and who loses because of oilsands development has become highly politicized as regional economic power has shifted;[24,25] unfortunately, the recent war of words between the leaders of Alberta and Ontario indicates that having a constructive dialogue about this issue remains a challenge.[26]

The Canadian Energy Research Institute (CERI) has modeled the regional economic impacts of oilsands development over the next 25 years. Based on their considerable assumptions — including no constraints to pipeline development and parity of the Canadian dollar for a quarter century — CERI estimates that Alberta will realize by far the greatest share of benefits from the surge in oilsands development, with 94 per cent ($4.9 trillion) of the GDP associated with oilsands investment and operations occurring within the province. The remaining six per cent of GDP will be realized in Ontario (3.0 per cent or $142 billion), British Columbia (1.3 per cent or $63 billion), and Quebec (0.66 per cent or $31 billion).[27]

However, it's not all good news for Alberta. As oilsands development has expanded, the province has struggled with an overheated economy. Only Alberta's inflation rates were well above the national average four out of the past 10 years, while all other provinces saw inflation within 0.8 per cent of the average value.[28,29] One of the main factors behind Alberta's high

---

[21] Jules Dufort, *Impact of the Exchange Rate Appreciation on Quebec Export and GDP Growth,"* Ministere du Developpement economiqu et regional et de la recherché (2004), 9.

[22] Statistics Canada, *Provincial and Territorial Economic Accounts Review*, 13-016-X (2010). http://www.statcan.gc.ca/pub/13-016-x/13-016-x2011001-eng.htm

[23] Until 2008, Southern Ontario was the only region in Canada without a Federal Development Agency, ostensibly because of their historically robust economy. But in the February 2009 federal budget, a Southern Ontario Development Agency was created to "promote economic diversification and restructuring in Canada's industrial core." In: Michel Beine, Charles S. Bos and Serge Coulombe, *Does the Canadian Economy suffer from the Dutch Disease?* Tinbergen Institute Discussion Paper 2009-096/4 (2009).

[24] Barbara Yaffe, "Mulcair faces a 'western front' on oilsands," *Financial Post*, May 9, 2012. http://business.financialpost.com/2012/05/09/mulcair-faces-a-western-front-on-oil-sands/

[25] Roger Gibbins, "Gibbins: Oilsands criticism reveals Mulcair's naivete," Canada.com, May 8, 2012, http://www.canada.com/opinion/op-ed/Gibbins+Oilsands+criticism+reveals+Mulcair+naivete/6581515/story.html

[26] Karen Howlett and Dawn Walton, "Redford's energy vision clashes with McGuinty's," *Globe and Mail*, February 27, 2012. http://www.theglobeandmail.com/news/politics/mcguinty-rebuffs-redfords-oil-sands-plea/article2351145/

[27] Afshin Honarvar, Dinara Millington, Jon Rozhon, Thorn Walden, and Carlos Murillo, *Economic Impacts of Staged Oil Sands Projects in Alberta (2010–2035)* Study no. 125 (Canadian Energy Research Institute, 2011), 31.

[28] Inflation rate is the percentage increase in the price of goods and services. In Canada, the consumer price index, which tracks the price of a fixed basket of consumer goods, is used to measure inflation.

inflation rate is the shortage of labour and materials in the oilsands sector. Operators' willingness to pay top dollar for scarce material and high wages to attract and retain skilled labour has driven up operating costs for the oilsands 250 per cent since 2000.[30] A high dollar hurts revenue for Alberta as well; with every one-cent increase over a 12-month period, the Alberta Treasury loses $247 million.[31]

The federal government has left no doubt that it sees expanding oilsands production and establishing access to new markets via pipeline as a critical nation-building project for Canada.[32] But this drive to expand the oilsands is creating significant regional imbalances with respect to GDP growth, employment, inflation and competitiveness.

As noted, the OECD warned about these "large regional disparities" created by oilsands development nearly four years ago.[33] Meanwhile, oilsands production has increased 47 per cent since 2008 and the federal government is undertaking sweeping changes to fast-track permitting for oilsands-related projects, opening the door to even more rapid development.[34] In that context, the regional economic imbalance among provinces is likely to worsen, given federal efforts to encourage the growth in oilsands without any corresponding efforts to address the economic downsides being experienced in other provinces and sectors.

The following suggestions outline a path forward for near-term action to address the most acute effects of Canada's oilsands fever already being felt, while also encouraging vision and leadership to navigate Canada toward a sustainable energy future:

1. **Establish a Federal Savings Fund for oil and gas revenues.** In other countries that are heavily dependent on oil exports, like Norway, non-renewable resource funds have been established to save for the future, to counteract the appreciation of the local currency, to provide resources to soften the impacts of the boom and bust cycles of resource-dependent economies, and to smooth a transition to a clean energy economy.

2. **Eliminate preferential tax treatment for the oil and gas sector.** Canada's oil and gas sector benefits from federal tax breaks totaling $1.3 billion in 2009, yet the OECD has shown these benefits lead to foregone federal revenue and increase economic disparity between resource-rich provinces and other regions. Both the OECD and the International Energy Agency have recommended

---

[29] Inflation rate was calculated as a percentage change of yearly total CPI figures from Statistics Canada, CANSIM Table 326-0021, "Consumer Price Index, 2009 basket."
http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=3260021

[30] Dave Cooper, "Inflation holds oilsands in grip: economist," *Edmonton Journal*, December 2, 2011
http://www2.canada.com/edmontonjournal/news/business/story.html?id=4ce3d206-a791-4bb0-8732-000a68586d16

[31] Alberta Finance, *Economic Outlook: Budget 2012,* 88.
http://www.finance.alberta.ca/publications/budget/budget2012/fiscal-plan-economic-outlook.pdf

[32] Peter O'Neil, "Oil industry's 'nation-building' pipeline won't be stopped by protestors: Natural Resources Minister," *National Post*, December 6, 2011. http://news.nationalpost.com/2011/12/06/oil-industrys-nation-building-pipeline-wont-be-stopped-by-protesters-natural-resources-minister/

[33] OECD, *OECD Economic Surveys: Canada* (2008), 109.

[34] Blakes, "Canadian Government Introduces Legislation to Streamline Environmental Approvals," May 1, 2012.
http://www.blakes.com/english/view_bulletin.asp?ID=5343

removing inefficient fossil fuel subsidies,[35] and Canada has pledged, along with other G20 nations, to phase out such subsidies over the medium term.[36]

3. **Convene an expert panel of the Royal Society of Canada on oilsands and the Canadian economy.** The RSC has the independence, objectivity and credibility to undertake an expert review of these economic issues and provide public policy recommendations to ensure informed decisions are made about how oilsands development occurs within Canada's economy.

4. **Initiate a federal committee study on regional competitiveness in a high-dollar era.** The House of Commons standing committee on Industry, Science and Technology is well-positioned to undertake a study on regional economic competitiveness and the high dollar. The study should look at trends in the restructuring of the Canadian economy and associated regional disparities, and aim to identify actions that the federal government can take to ensure a robust, diverse economy that supports economic growth and competitiveness throughout Canada.

5. **Continue cooperating to establish a Canadian energy strategy that aims to achieve the following objectives:**
   - Provide accessible, fair and efficient energy services to current and future generations of Canadians;
   - Create opportunities for Canada to compete in the international marketplace as a leader in innovative clean energy technologies and solutions;
   - Demonstrate leadership on climate change through constructive international engagement and domestic actions to fulfill Canada's commitments to greenhouse gas emission reduction; and,
   - Protect and restore Canada's environment by establishing, monitoring and enforcing science-based limits on impacts to our air, land and water.

---

35 OECD, "OECD and IEA recommend reforming fossil-fuel subsidies to improve the economy and the environment," media release, October 4, 2011. http://www.oecd.org/document/35/0,3746,en_21571361_44315115_48804623_1_1_1_1,00.html

36 Jeff Mason and Darren Ennis, "G20 agrees on phase-out of fossil fuel subsidies," *Reuters*, September 25, 2009. http://www.reuters.com/article/2009/09/26/us-g20-energy-idUSTRE58O18U20090926