Sectoral Profile

Forestry and Forest Products

Atlantic Region

2018

KEY HIGHLIGHTS

- Atlantic Canada's forestry and forest products sector has grown significantly over the past half-decade. Nonetheless, employment gains have been considerably weaker, as firms have found ways to raise labour productivity.
- Looking forward, productivity gains should continue to slightly outpace job growth over the next few years. Despite elevated demand for lumber from the U.S., only marginal employment growth (+0.3%) is expected within the region's forestry and forest products sector over the 2018-2020 forecast period.
- While forestry and forest products activities generated less than 2.0% of economic activity across the Atlantic region in 2017, some communities depend considerably more on income generated by forestry than others. In New Brunswick, it contributes 4.6% of economic activity, well above the 0.4% share in Prince Edward Island.
- Significant restructuring in Atlantic Canada's forestry and forest products sector in the mid-2000s resulted in consolidation around a few key players and a shift in product offerings. These changes have left remaining operators in a better position to withstand rising instability resulting from U.S. protectionist measures.

SECTOR PROFILE

The forestry and forest products sector can be broken-down into three main activities. First, firms operating in forestry and logging and support activities for forestry are responsible for field operations and harvesting timber, including cutting and hauling it to mills. Wood product manufacturing operations produce both primary (such as softwood lumber and structural panels) and secondary (such as millwork and engineered wood) wood products. Lastly, paper manufacturers produce a wide range of products, from newsprint and household tissues to rayon, a fiber that is used in bath towels.[1] The two manufacturing components of Atlantic Canada's forestry and forest products sector are somewhat integrated, with wood chips from sawmilling activities typically serving as inputs to pulp and paper production.[2]

Atlantic Canada's forests represent a valuable natural resource for the region as a whole, particularly for the many rural communities where forest-related work is the main source of income.[3] In 2017, production in the forestry and forest products sector amounted to $1.9 billion, representing 1.8% of the region's overall gross domestic product (GDP).[4] Two-thirds of this value was generated in wood product and paper manufacturing, each contributing roughly half a billion dollars to the region's economy. The remaining third was generated by forestry and logging and the activities that support these operations.[5]

The majority of Atlantic Canada's forestry and forest products output is eventually exported to foreign markets. Indeed, the sector as a whole is heavily reliant on external demand, particularly from the United States (U.S.), which consumed two-thirds of the Atlantic region's $2.5 billion in shipments in 2017. As a whole, the Atlantic provinces enjoy a significant trade surplus in forestry and forest products with the rest of the world, surpassing $300M in 2017.

Paper manufacturing products represented two-thirds of the Atlantic region's forest products exports in 2017. Uncoated paper and paperboard was the highest value shipment, while various types of woodpulp and newsprint helped make-up the bulk of the remainder. Wood products manufacturing exports were comprised mainly of lumber, while little in the way of raw timber (forestry and logging output) was exported.

In 2017, there were 19,300 people in Atlantic Canada employed in the forestry and forest products sector, representing 1.8% of the region's workforce.

Table One
Employed Labour Force - Forestry & Forest Products
Atlantic Canada and Canada

	Atlantic	Canada
Forestry and Forest Products	100%	100%
Forestry and logging	19.0%	17.1%
Support activities for forestry	7.1%	6.6%
Wood product manufacturing	42.6%	48.1%
Sawmills and wood preservation	26.2%	22.0%
Veneer, plywood and engineered wood product manufacturing	5.4%	7.6%
Other wood product manufacturing	10.9%	18.5%
Paper manufacturing	31.3%	28.2%
Pulp, paper and paperboard mills	23.3%	16.1%
Converted paper product manufacturing	8.0%	12.1%

Source: Statistics Canada, 2016 Census of Canada, Table 98-400-X2016290

Nearly two-thirds of all forestry and logging and wood product manufacturing employment within Atlantic Canada occurs outside the region's major urban centres (Census Metropolitan Areas and Census Agglomerations). In contrast, paper manufacturing operations are mainly based within urban centres[6].

Paper manufacturing operations are also highly concentrated compared to the rest of the sector, with nearly one-third of operators in the Atlantic region employing 200-or-more workers.[7] Jobs within this subsector are typically highly paid, with workers earning well above the region's all-sector average throughout the Atlantic region's four provinces. In contrast, those employed in forestry and logging and wood product manufacturing typically earn below-average incomes.[8]

According to the 2016 Census, the unemployment rate across forestry and forest products was 17.7% in 2016.[9] However, there was notable variation across subsectors, with wood product manufacturing (9.1%) and paper manufacturing (4.9%) being much more stable than forestry and logging (37.5%)[10], where high unemployment is at least partially attributable to the subsector's inherent seasonality. Employment typically peaks in the late summer or early fall, while the workforce is scaled-back significantly during the spring break-up, when melting snow and muddy conditions makes work dificult. In 2017, the spring workforce was half of that employed in July.[11]

Outside of these cyclical variations, operations are also subject to external factors like weather, pests and wildfires. In 2016, there were an estimated 660 wildfires in Atlantic Canada, though the 750 hectares burned represented a small fraction of the total forest and had little impact on operations. Insects were more disruptive that year, defoliating or killing over 40,000 hectares of forest.[12] In 2017, the spruce budworm, which has already affected several million hectares of forest in Quebec[13], made inroads into New Brunswick. The extent of the damage brought on by this invasive species remains to be seen.

RECENT HISTORY

Atlantic Canada's forestry and forest products sector has undergone significant expansion over the past half-decade, due to sizeable growth in demand from U.S. housing construction and – more recently – elevated prices. After reaching its lowest point on record in 2012, the sector's GDP grew by over 30% by 2017, compared to only 4.9% for the economy as a whole.

This recent stretch of positive momentum was preceded by a substantial contraction between 2004 and 2012 that resulted in the closure of many mills. In total, Atlantic Canada's forestry and forest products sector shed a third of its output and over 15,000 jobs over this period. The decline was brought on by a number of factors, including a decline in demand for building materials (particularly from the U.S.), declining newspaper circulation, a strong Canadian dollar and rising energy prices.[14]

As a result of these pressures, the sector was forced to consolidate around a few key producers and products. Although devastating at the time, this restructuring appears to have been beneficial for the sector in the long-run. While there are significantly fewer mills in operation today, they are operating at a much greater level of efficiency due to improved labour productivity and reduced waste[15]. As a result, they have been able to keep up with growing demand over the past several years, even with fewer workers.

An evolving product mix has reflected a major shift in preferences, particularly in paper manufacturing, as consumers are increasingly adopting digital communications technologies in favour of paper products. As such, operators have transitioned away from products like newsprint and certain other grades of writing and printing paper, towards others like glossy coated (i.e. supercalendered) paper and dissolving pulp, which is converted to fibres used in textile production.[16] Shipments of toilet and facial tissues, as well as corrugated cardboard have also increased significantly over the past decade[17], reflecting factors like continued population growth and an increase in the need for packaging to support online commerce. As a result of these adaptations, paper manufacturing output has remained fairly healthy. While the subsector's GDP is down compared to a decade ago, it has seen significant growth (over 40%) over the past five years.

The structure of the wood product manufacturing subsector has had to undergo less change over the past decade and growth has been more steady, with GDP expanding by over 15% since 2007. It's notable that much of the recent success observed in both wood product and paper manufacturing is attributable to elevated prices caused by strong demand from south of the border.

Nevertheless, recent strength in Atlantic Canada's forestry and forest products sector has left operators in a better position to withstand recent challenges. One of the most notable developments has been a rising instability within the Atlantic region's wood product manufacturing subsector stemming from the U.S.'s decision to take measures aimed at reducing the demand for Canadian softwood lumber products. In 2017, following the expiry of the 2006 Softwood Lumber Agreement two years earlier, the U.S. Department of Commerce began applying countervailing and anti-dumping tariffs on Canadian softwood lumber producers. While products originating from Newfoundland and Labrador (N.L), Nova Scotia (N.S.) and Prince Edward Island (P.E.I.) were eventually granted exemptions, tariffs on New Brunswick (N.B.) producers now range from 9.92% to 20.83%.[18]

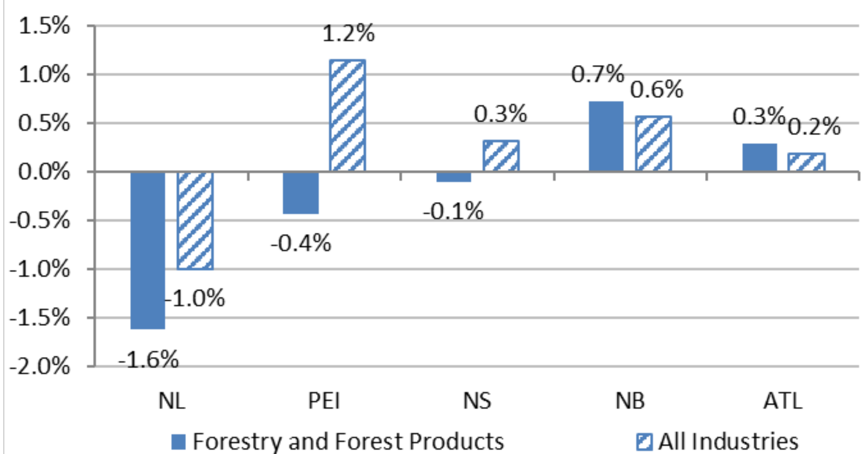
So far, there has been little noticeable impact to N.B. operators and growth in the Atlantic region's wood product manufacturing subsector has continued on at a healthy pace. It appears that the negative impacts associated with the imposed duties have been completely outweighed by even larger price increases caused by continued strength in U.S. homebuilding and supply constraint issues in Western Canada stemming from wildfires, pest infestations and transportation bottlenecks.[19] This means that the burden of these additional costs has been mainly passed on to American consumers, who have had limited ability to change their suppliers in the short-term.

Employment in the forestry and forest products sector in Atlantic Canada has never recovered from the substantial contraction that took place between 2004 and 2012. While output as measured by real GDP has since rebounded, employment has continued to trend downward, falling by over 30% during the past decade, alone.[20] Consolidation has rendered existing firms much more efficient, with larger companies able to reap the benefits of economies of scale, producing more with less labour.

EXPECTED OUTLOOK

Forestry and forest products sector employment in Atlantic Canada is expected to grow marginally (0.3%) over the 2018-2020 forecast period, suggesting that strong demand from the U.S. will continue to offset the potential negative impacts of U.S. trade instability and the risks associated with evolving consumer demand for paper products. Outcomes are varied at the provincial level, with job gains (+0.7%) in N.B. expected to offset losses in N.L. (-1.6%), P.E.I. (-0.4%) and N.S. (-0.1%).

Projected Average Annual Employment Growth Rate (%), Atlantic Provinces, 2018-2020



Source: Employment and Social Development Canada / Service Canada, Regional Occupational Outlooks in Canada, 2018-2020

The U.S. National Association of Home Builders projects that U.S. housing starts will increase by 1.6% in 2019, followed by 1.0% in 2020,[21] meaning wood product manufacturing in Atlantic Canada should continue to benefit from elevated demand for lumber products over the forecast period. That being said, prices could begin to trend downwards in the face of loosening supply constraints in Western Canada and increasing production capacity within the U.S. At some point, this could have negative consequences for N.B. producers if tariffs continue to be applied to the province's softwood lumber, going forward.

Paper manufacturing is not expected to contribute to growth over the forecast period, as digital communications technologies are expected to continue to replace demand for various paper grades – particularly newsprint. While high prices have provided a significant boost to industry revenues in recent history, the outlook remains poor, as these same higher prices are likely to accelerate the transition from print to digital media.[22] That being said, growth in certain areas should limit the overall decline. In particular, e-commerce sales are expected to continue to grow exponentially and this should support demand for paper-based packaging. The outlook for sanitary paper products is also positive, supported by rising demand in both emerging and mature markets[23]. There is also a growing appetite for alternatives to single-use plastic products, like straws and grocery bags, and paper products have the potential to fill some of this void.

More generally, product innovation offers opportunities for growth throughout the forestry and forest products sector. For instance, there appears to be a significant amount of potential in the use of engineered wood products in construction projects[24] and there are several regional players exploring the possibility of replacing concrete and steel with locally-sourced timber.

Forestry and logging growth will reflect the success of downstream manufacturing activities detailed above, as the majority of harvested timber is refined by wood product or paper manufacturers before being sold to end consumers.

SUB-REGIONAL DYNAMICS

Newfoundland and Labrador

- N.L.'s forestry and forest products sector is relatively small and depends to a greater degree than other provinces on forestry and logging activity, which accounts for a third of the sector's GDP.[25]
- Despite there being only one pulp and paper mill in N.L. (Corner Brook Pulp & Paper Limited), newsprint overwhelmingly dominates the province's exports, accounting for 95% of international forest products shipments.[26]
- The majority of N.L.'s wood product manufacturing production is generated by a few larger mills[27] and nearly all of this output is sold into the local market or to other parts of Canada.[28]

Prince Edward Island

- P.E.I. is the least dependent of all Atlantic provinces on the forestry and forest products sector and only paper manufacturing contributes any noticeable impact to the province's economy.
- Paper containers make up nearly all (97%) of the province's forestry and forest products exports.

Nova Scotia

- N.S.'s paper manufacturing subsector contracted by nearly 15% over the past decade, on a GDP basis, mainly due to a decline in newsprint production.
- Paper manufacturing continues to account for the bulk of N.S.'s exports (over 70% in 2017), though woodpulp has emerged as the province's top export, surpassing uncoated paper and newsprint.
- Growth in N.S.'s wood products manufacturing subsector offset some of the declines observed elsewhere, over the past decade.

New Brunswick

- Of all Atlantic provinces, the forestry and forest products sector is most important to N.B, accounting for 4.6% of the province's GDP and 3.6% of its overall workforce in 2017.
- Over 70% of Atlantic Canada's forestry product exports originated in N.B., in 2017. However, lumber products accounted for roughly a third of this volume, suggesting that the province is exposed to a significant degree of risk stemming from U.S. tariffs on softwood lumber.
- Over the past decade, exports have shifted away from paper products towards various grades of woodpulp, which altogether accounting for upward of a half billion dollars in shipments.

APPENDIX

Table Two
Real GDP (2017) and Employment (2017) for Atlantic Canada

	Forestry and Forest Products			All Industries		
	Number	Share of Total	AAGR*	Number	Share of Total	AAGR*
Real GDP (M$)	$1,893.7	100.0%	0.5%	$103,262.4	100.0%	0.4%
Newfoundland and Labrador	$127.0	6.7%	-4.8%	$31,585.2	30.6%	-0.3%
Prince Edward Island	$33.0	1.7%	-3.0%	$5,540.0	5.4%	1.5%
Nova Scotia	$342.9	18.1%	-1.0%	$35,955.4	34.8%	0.8%
New Brunswick	$1,390.8	73.4%	1.8%	$30,181.8	29.2%	0.4%
Employment (000s)	19.3	100.0%	-4.0%	1099.8	100.0%	0.1%
Male	16.6	86.0%	-4.1%	550.8	50.1%	-0.1%
Female	2.7	14.0%	-2.8%	549.0	49.9%	0.2%
15-24 years old	1.8	9.3%	-1.0%	140.3	12.8%	-1.5%
25-54 years old	12.1	62.7%	-5.8%	706.1	64.2%	-0.7%
55 years and older	5.3	27.5%	0.6%	253.4	23.0%	4.3%
Worked full-time	18.6	96.4%	-4.0%	918.9	83.6%	0.1%
Worked part-time	0.6	3.1%	-5.9%	180.9	16.4%	-0.1%
Self-employed	1.9	9.8%	-5.9%	131.5	12.0%	0.0%
Employees	17.4	90.2%	-3.7%	968.3	88.0%	0.1%
Permanent job	13.9	72.0%	-4.5%	788.2	71.7%	0.2%
Temporary job	3.4	17.6%	-0.3%	180.1	16.4%	-0.2%
Less than high school	2.8	14.5%	-8.2%	103.3	9.4%	-4.4%
High school graduate	6.3	32.6%	-1.6%	286.2	26.0%	-0.8%
Postsecondary cert. or diploma	7.7	39.9%	-4.4%	430.5	39.1%	0.5%
University degree	2.4	12.4%	-1.5%	279.8	25.4%	3.0%
Newfoundland and Labrador	1.8	9.3%	-4.7%	224.1	20.4%	0.3%
Prince Edward Island	0.5	2.6%	-5.7%	73.7	6.7%	0.7%
Nova Scotia	4.3	22.3%	-6.9%	449.0	40.8%	0.0%
New Brunswick	12.6	65.3%	-2.5%	352.9	32.1%	-0.1%

Source: Statistics Canada, Labour Force Survey - Custom Table; Table 36-10-0402-01

*Average annual growth rate for last ten years of available data (GDP 2008-17 and Employment 2008-17)

Note: *In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.*

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[6] Statistics Canada. 2016 Census of Population. Catalogue number 98-400-X2016290.
[7] Statistics Canada. Table 33-10-0037-01.
[8] Statistics Canada. 2016 Census of Population. Catalogue number 98-400-X2016364.
[9] Note: Due to data limitations with respect to Statistics Canada's Labour Force Survey, the unemployment rate across the Forestry and forest products sector in Atlantic Canada, for 2017, is unknown.
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