

Appendix: Industry Productivity Growth and Its Contributions to Aggregate Productivity Growth

Table A1: Sources of Labour Productivity Growth in Canadian Industries, 1987-2010
(percentage points contribution per year)

| Industry | LP | capital deepen | labour compositi | Interm. deepening | MFP |
|---|------|----------------|------------------|-------------------|-------|
| Crop and animal production | 4.50 | 0.38 | 0.11 | 2.88 | 1.13 |
| Forestry, Fishing, and Related | 2.03 | 0.32 | -0.05 | 1.15 | 0.62 |
| Oil and gas extraction | 0.50 | 1.04 | 0.06 | 1.02 | -1.62 |
| Mining (exc. oil & gas extrac- tion) | 0.46 | 0.71 | 0.10 | 0.62 | -0.98 |
| Support activities for mining, oil & gas | 0.34 | 0.33 | 0.06 | 0.34 | -0.39 |
| Utilities | 0.39 | 0.18 | 0.11 | 0.50 | -0.40 |
| Construction | 0.45 | 0.10 | 0.08 | 0.41 | -0.15 |
| Food, beverage and tobacco | 1.21 | 0.16 | 0.07 | 1.19 | -0.21 |
| Textile and textile products | 1.42 | 0.19 | 0.09 | 0.93 | 0.21 |
| Clothing, leather and allied products | 1.64 | 0.39 | 0.12 | 0.94 | 0.19 |
| Paper | 2.70 | 0.35 | 0.10 | 1.63 | 0.61 |
| Printing and related | 2.95 | 0.25 | 0.11 | 1.95 | 0.63 |
| Petroleum and coal products | 0.75 | 0.39 | 0.20 | 0.55 | -0.40 |
| Chemical manufacturing | 0.40 | 0.08 | 0.03 | 0.19 | 0.09 |
| Plastics and rubber products | 1.93 | 0.23 | 0.09 | 1.11 | 0.50 |
| Wood products | 1.79 | 0.19 | 0.16 | 0.97 | 0.46 |
| Non-metallic mineral products | 1.68 | 0.39 | 0.04 | 1.12 | 0.13 |
| Primary metal | 4.14 | 0.25 | 0.08 | 3.23 | 0.58 |
| Fabricated metal products | 0.49 | 0.05 | 0.12 | 0.14 | 0.19 |
| Machinery | 2.11 | 0.33 | 0.19 | 1.27 | 0.32 |
| Computer and electronic prod- ucts | 6.65 | 0.56 | 0.22 | 4.70 | 1.16 |
| Electrical equipment | 2.28 | 0.38 | 0.17 | 1.45 | 0.28 |
| Transportation equipment | 3.26 | 0.32 | 0.09 | 2.51 | 0.33 |
| Furniture and related products | 1.83 | 0.26 | 0.12 | 1.09 | 0.36 |
| Miscellaneous manufacturing | 2.30 | 0.30 | 0.10 | 1.42 | 0.49 |
| Wholesale trade | 3.16 | 0.78 | 0.20 | 1.32 | 0.86 |
| Retail trade | 2.43 | 0.55 | 0.23 | 1.08 | 0.57 |
| Transportation and warehous- ing | 1.33 | 0.53 | 0.14 | 0.75 | -0.08 |
| Information and cultural indus- tries | 2.92 | 1.13 | 0.11 | 1.46 | 0.22 |
| Finance and insurance | 1.26 | 0.63 | 0.13 | 0.53 | -0.04 |
| Professional service | 1.62 | 0.71 | 0.20 | 1.26 | -0.55 |
| Administration, waste manage- ment | 1.10 | 0.69 | 0.15 | 0.98 | -0.72 |
| Educational services | 0.50 | 0.18 | 0.68 | -0.72 | 0.37 |
| Health care and social assistance | 0.33 | 0.19 | 0.01 | 0.86 | -0.74 |
| Arts, entertainment and recre- ation | 0.56 | 0.50 | 0.19 | 1.02 | -1.16 |
| Accommodation and food ser- vices | 1.04 | 0.10 | 0.16 | 0.91 | -0.12 |
| Other services | 1.81 | 0.42 | 0.14 | 1.45 | -0.20 |
| Average | 1.79 | 0.39 | 0.13 | 1.20 | 0.07 |

Source: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics.

Table A2: Sources of Labour Productivity Growth in U.S. Industries, 1987-2010
(percentage points contribution per year)

| Industry | LP | capital deepen | labour composition | Interm. deepening | MFP |
|--|-------|----------------|--------------------|-------------------|-------|
| Crop and animal production | 2.71 | 0.42 | 0.04 | 0.55 | 1.71 |
| Forestry, Fishing, and Related | 0.03 | 0.18 | 0.27 | -0.04 | -0.38 |
| Oil and gas extraction | 0.92 | 0.10 | 0.00 | 0.54 | 0.28 |
| Mining (exc. Oil & gas extraction) | 1.97 | 0.37 | 0.04 | 0.03 | 1.53 |
| Support activities for mining, oil & gas | 1.78 | -0.65 | -0.15 | 0.32 | 2.27 |
| Utilities | 2.93 | 1.10 | 0.06 | 0.82 | 0.96 |
| Construction | -0.66 | 0.22 | 0.15 | -0.12 | -0.91 |
| Food, beverage and tobacco | 1.05 | 0.23 | 0.06 | 0.92 | -0.15 |
| Textile and textile products | 2.55 | 0.30 | 0.13 | 1.39 | 0.73 |
| Clothing, leather and allied products | -0.35 | 0.48 | 0.71 | -3.06 | 1.52 |
| Paper | 1.28 | 0.16 | 0.18 | 0.89 | 0.06 |
| Printing and related | 1.90 | 0.49 | 0.10 | 1.32 | 0.00 |
| Petroleum and coal products | 1.26 | 0.33 | 0.13 | -0.01 | 0.81 |
| Chemical manufacturing | 2.75 | 0.35 | 0.05 | 1.10 | 1.24 |
| Plastics and rubber products | 2.05 | 1.54 | 0.08 | 0.71 | -0.29 |
| Wood products | 2.14 | 0.43 | 0.17 | 1.02 | 0.52 |
| Non-metallic mineral products | 0.86 | 0.35 | 0.07 | 0.51 | -0.07 |
| Primary metal | 3.01 | 0.20 | 0.11 | 2.24 | 0.46 |
| Fabricated metal products | 1.38 | 0.29 | 0.13 | 0.97 | 0.00 |
| Machinery | 2.46 | 0.49 | 0.17 | 2.12 | -0.32 |
| Computer and electronic products | 10.51 | 1.23 | 0.29 | 0.66 | 8.33 |
| Electrical equipment | 2.43 | 0.70 | 0.19 | 2.47 | -0.93 |
| Transportation equipment | 3.03 | 0.50 | 0.16 | 2.19 | 0.19 |
| Furniture and related products | 1.65 | 0.40 | 0.22 | 1.10 | -0.07 |
| Miscellaneous manufacturing | 2.89 | 0.69 | 0.28 | 1.01 | 0.91 |
| Wholesale trade | 3.42 | 0.72 | 0.18 | 0.90 | 1.62 |
| Retail trade | 2.64 | 0.58 | 0.15 | 0.59 | 1.34 |
| Transportation and warehousing | 1.54 | 0.08 | 0.13 | 0.20 | 1.13 |
| Information and cultural industries | 4.50 | 1.80 | 0.15 | 1.51 | 1.04 |
| Finance and insurance | 2.52 | 1.21 | 0.16 | 0.92 | 0.23 |
| Professional service | 1.75 | 0.48 | 0.26 | 0.87 | 0.14 |
| Administration, waste management | 1.84 | 0.29 | 0.28 | 0.79 | 0.48 |
| Educational services | -2.88 | -0.23 | 0.04 | -2.40 | -0.29 |
| Health care and social assistance | -0.16 | 0.05 | -0.08 | 0.57 | -0.70 |
| Arts, entertainment and recreation | 1.88 | 0.25 | 0.18 | 1.38 | 0.07 |
| Accommodation and food services | 2.03 | 0.58 | 0.09 | 0.46 | 0.91 |
| Other services | 1.10 | 0.10 | 0.06 | 1.31 | -0.38 |
| Average | 1.97 | 0.45 | 0.14 | 0.72 | 0.65 |

Source: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics.

Table A3: Sources of Labour Productivity Growth in Canadian Industries, 2010-2014
(percentage points contribution per year)

| Industry | LP | capital deepen | labour compositn | Interm. deepening | MFP |
|--|-------|----------------|------------------|-------------------|-------|
| Crop and animal production | -3.13 | -0.48 | 0.30 | -2.68 | -0.27 |
| Forestry, Fishing, and Related | -2.11 | -0.47 | 0.05 | -1.35 | -0.34 |
| Oil and gas extraction | 5.94 | 3.15 | -0.01 | 3.10 | -0.30 |
| Mining (exc. Oil & gas extraction) | -3.55 | 1.33 | 0.04 | -0.72 | -4.20 |
| Support activities for mining, oil & gas | 2.67 | 0.81 | 0.08 | 0.83 | 0.96 |
| Utilities | 4.03 | 3.64 | 0.03 | 0.93 | -0.56 |
| Construction | -1.91 | -0.05 | 0.03 | -1.34 | -0.55 |
| Food, beverage and tobacco | 2.39 | 0.15 | 0.14 | 1.82 | 0.28 |
| Textile and textile products | -0.79 | -0.44 | -0.22 | -0.35 | 0.23 |
| Clothing, leather and allied products | 2.49 | 0.59 | 0.14 | 0.84 | 0.92 |
| Paper | 3.57 | -0.31 | -0.02 | 2.36 | 1.55 |
| Printing and related | -0.95 | -0.27 | -0.07 | -0.61 | 0.01 |
| Petroleum and coal products | 0.46 | -0.15 | 0.04 | 0.36 | 0.21 |
| Chemical manufacturing | 4.97 | 0.64 | -0.02 | 3.99 | 0.36 |
| Plastics and rubber products | 1.56 | -0.25 | 0.01 | 0.94 | 0.85 |
| Wood products | 2.47 | -0.09 | -0.03 | 1.41 | 1.17 |
| Non-metallic mineral products | 1.40 | 0.05 | 0.19 | 0.86 | 0.30 |
| Primary metal | 3.23 | 0.53 | -0.01 | 2.67 | 0.04 |
| Fabricated metal products | 2.01 | -0.31 | -0.02 | 0.83 | 1.50 |
| Machinery | 3.37 | -0.04 | 0.02 | 1.79 | 1.60 |
| Computer and electronic products | 2.67 | 0.88 | -0.12 | 1.65 | 0.26 |
| Electrical equipment | 1.22 | 0.57 | 0.04 | 0.67 | -0.06 |
| Transportation equipment | 0.35 | -0.58 | 0.00 | 0.30 | 0.63 |
| Furniture and related products | 1.98 | -0.18 | -0.13 | 1.31 | 0.98 |
| Miscellaneous manufacturing | 2.14 | 0.43 | 0.10 | 1.84 | -0.23 |
| Wholesale trade | 3.00 | 0.93 | 0.15 | 0.93 | 1.00 |
| Retail trade | 1.43 | 0.20 | 0.07 | 0.78 | 0.39 |
| Transportation and warehousing | 2.96 | 1.24 | -0.04 | 1.44 | 0.33 |
| Information and cultural industries | 0.55 | -0.02 | 0.07 | 0.22 | 0.29 |
| Finance and insurance | 1.25 | -0.29 | 0.13 | 0.38 | 1.02 |
| Professional service | 2.55 | 0.43 | 0.18 | 0.96 | 0.97 |
| Administration, waste management | 1.32 | 0.65 | 0.12 | 0.22 | 0.34 |
| Educational services | -0.90 | -0.60 | 0.15 | -0.29 | -0.16 |
| Health care and social assistance | 1.58 | 0.42 | 0.15 | 0.73 | 0.29 |
| Arts, entertainment and recreation | 1.06 | 0.53 | -0.17 | 0.25 | 0.45 |
| Accommodation and food services | 0.50 | -0.03 | 0.08 | -0.08 | 0.53 |
| Other services | 2.52 | 0.11 | 0.16 | 0.72 | 1.54 |
| Average | 1.47 | 0.34 | 0.04 | 0.75 | 0.33 |

Source: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics.

Table A4: Sources of Labour Productivity Growth in U.S. Industries, 2010-2014
(percentage points contribution per year)

| Industry | LP | capital deepen | labour composition | Interm. deepening | MFP |
|--|-------|----------------|--------------------|-------------------|--------|
| Crop and animal production | -0.30 | 0.87 | -0.04 | 0.19 | -1.33 |
| Forestry, Fishing, and Related | 0.92 | 0.55 | -0.63 | 0.03 | 0.96 |
| Oil and gas extraction | 1.30 | -5.04 | 0.07 | -1.76 | 8.04 |
| Mining (exc. Oil & gas extraction) | 1.10 | 1.86 | 0.08 | 3.34 | -4.18 |
| Support activities for mining, oil & gas | 5.39 | -1.73 | -0.03 | 4.24 | 2.91 |
| Utilities | -1.11 | 0.73 | 0.06 | -1.19 | -0.71 |
| Construction | -0.76 | -0.32 | 0.01 | -0.26 | -0.18 |
| Food, beverage and tobacco | -0.81 | 0.13 | 0.05 | -0.40 | -0.60 |
| Textile and textile products | 2.00 | -0.13 | 0.21 | 0.75 | 1.18 |
| Clothing, leather and allied products | -0.49 | -0.03 | 0.49 | 14.29 | -15.24 |
| Paper | 0.32 | -0.24 | 0.02 | 1.12 | -0.59 |
| Printing and related | 1.95 | 0.10 | 0.01 | 1.71 | 0.13 |
| Petroleum and coal products | 1.14 | -0.10 | 0.01 | 0.38 | 0.85 |
| Chemical manufacturing | -0.50 | 0.04 | 0.01 | -0.89 | 0.34 |
| Plastics and rubber products | -0.54 | 0.93 | -0.02 | 2.13 | -3.58 |
| Wood products | -0.28 | -0.26 | 0.09 | 1.14 | -1.25 |
| Non-metallic mineral products | 1.93 | -0.12 | -0.39 | 0.97 | 1.47 |
| Primary metal | 0.24 | -0.30 | 0.17 | -0.12 | 0.50 |
| Fabricated metal products | -0.52 | -0.36 | -0.02 | 0.97 | -1.12 |
| Machinery | 0.66 | -0.24 | 0.04 | 1.23 | -0.37 |
| Computer and electronic products | -0.08 | 0.71 | 0.09 | -0.10 | -0.78 |
| Electrical equipment | 0.73 | -0.28 | 0.03 | 1.20 | -0.22 |
| Transportation equipment | 2.15 | -0.47 | -0.14 | 1.43 | 1.33 |
| Furniture and related products | 0.19 | -0.30 | -0.10 | 1.24 | -0.65 |
| Miscellaneous manufacturing | -2.21 | 0.01 | -0.30 | 0.11 | -2.02 |
| Wholesale trade | 1.95 | 0.16 | 0.04 | 1.30 | 0.45 |
| Retail trade | 1.64 | 0.05 | 0.06 | 1.21 | 0.32 |
| Transportation and warehousing | 0.21 | -0.27 | 0.06 | 0.68 | -0.27 |
| Information and cultural industries | 4.46 | 1.19 | 0.23 | 2.82 | 0.22 |
| Finance and insurance | 1.19 | -0.06 | 0.20 | 0.10 | 0.95 |
| Professional service | 0.62 | -0.25 | -0.10 | 0.32 | 0.64 |
| Administration, waste management | 0.44 | 0.01 | 1.80 | 1.02 | -2.39 |
| Educational services | -1.71 | 0.23 | 0.08 | -0.60 | -1.42 |
| Health care and social assistance | 0.42 | -0.01 | 0.14 | 0.61 | -0.32 |
| Arts, entertainment and recreation | 0.08 | -0.37 | 0.13 | 0.03 | 0.30 |
| Accommodation and food services | 2.55 | -0.36 | 0.11 | 1.43 | 1.38 |
| Other services | 1.27 | -0.02 | -0.02 | 1.40 | -0.10 |
| Average | 0.69 | -0.10 | 0.07 | 1.14 | -0.42 |

Source: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics.

**Table A5: Contributions of Capital Deepening by Industry to Business Sector
Labour Productivity Growth in Canada and the United States, 1987-2010
(percentage points per year)**

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|-------|---------------|
| Finance and insurance | 0.16 | 0.25 | -0.09 |
| Plastics and rubber products | 0.01 | 0.10 | -0.08 |
| Information and cultural industries | 0.08 | 0.15 | -0.08 |
| Utilities | 0.01 | 0.07 | -0.06 |
| Computer and electronic products | 0.01 | 0.06 | -0.05 |
| Chemical manufacturing | 0.00 | 0.02 | -0.01 |
| Retail trade | 0.06 | 0.07 | -0.01 |
| Professional service | 0.06 | 0.08 | -0.01 |
| Machinery | 0.01 | 0.02 | -0.01 |
| Fabricated metal products | 0.00 | 0.01 | -0.01 |
| Transportation equipment | 0.03 | 0.04 | -0.01 |
| Miscellaneous manufacturing | 0.00 | 0.01 | -0.01 |
| Electrical equipment | 0.01 | 0.01 | -0.01 |
| Wood products | 0.00 | 0.01 | -0.01 |
| Construction | 0.02 | 0.03 | 0.00 |
| Accommodation and food services | 0.01 | 0.01 | 0.00 |
| Food, beverage and tobacco | 0.02 | 0.02 | 0.00 |
| Textile and textile products | 0.00 | 0.00 | 0.00 |
| Clothing, leather and allied products | 0.00 | 0.01 | 0.00 |
| Furniture and related products | 0.00 | 0.00 | 0.00 |
| Petroleum and coal products | 0.00 | 0.00 | 0.00 |
| Printing and related | 0.01 | 0.01 | 0.00 |
| Non-metallic mineral products | 0.01 | 0.00 | 0.00 |
| Health care and social assistance | 0.01 | 0.01 | 0.00 |
| Educational services | 0.00 | 0.00 | 0.00 |
| Arts, entertainment and recreation | 0.01 | 0.00 | 0.00 |
| Crop and animal production | 0.02 | 0.01 | 0.00 |
| Forestry, Fishing, and Related | 0.01 | 0.00 | 0.01 |
| Wholesale trade | 0.08 | 0.08 | 0.01 |
| Paper | 0.01 | 0.00 | 0.01 |
| Support activities for mining, oil & gas | 0.01 | 0.00 | 0.01 |
| Other services | 0.01 | 0.00 | 0.01 |
| Primary metal | 0.01 | 0.00 | 0.01 |
| Administration, waste management | 0.03 | 0.01 | 0.02 |
| Mining (exc. Oil & gas extraction) | 0.02 | 0.00 | 0.02 |
| Transportation and warehousing | 0.06 | 0.01 | 0.06 |
| Oil and gas extraction | 0.08 | 0.00 | 0.08 |
| Sum of industry contributions | 0.89 | 1.10 | -0.22 |
| Reallocation | 0.09 | -0.12 | -0.21 |
| Aggregate capital deepening effect | 0.98 | 0.98 | 0.00 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.

**Table A6: Contributions of Labour Composition by Industry to Business Sector
Labour Productivity Growth in Canada and the United States, 1987-2010
(percentage points per year)**

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|--------|---------------|
| Professional service | 0.018 | 0.041 | -0.023 |
| Computer and electronic products | 0.004 | 0.014 | -0.009 |
| Administration, waste management | 0.007 | 0.014 | -0.007 |
| Clothing, leather and allied products | 0.001 | 0.008 | -0.006 |
| Information and cultural industries | 0.008 | 0.013 | -0.005 |
| Miscellaneous manufacturing | 0.001 | 0.004 | -0.003 |
| Transportation equipment | 0.009 | 0.012 | -0.003 |
| Forestry, Fishing, and Related | -0.001 | 0.001 | -0.002 |
| Machinery | 0.005 | 0.006 | -0.001 |
| Chemical manufacturing | 0.002 | 0.003 | -0.001 |
| Textile and textile products | 0.001 | 0.001 | -0.001 |
| Fabricated metal products | 0.004 | 0.004 | -0.001 |
| Furniture and related products | 0.001 | 0.002 | -0.001 |
| Electrical equipment | 0.002 | 0.003 | -0.001 |
| Plastics and rubber products | 0.005 | 0.005 | 0.000 |
| Non-metallic mineral products | 0.001 | 0.001 | 0.000 |
| Wood products | 0.004 | 0.004 | 0.000 |
| Arts, entertainment and recreation | 0.003 | 0.003 | 0.000 |
| Construction | 0.019 | 0.018 | 0.000 |
| Finance and insurance | 0.034 | 0.034 | 0.000 |
| Petroleum and coal products | 0.002 | 0.002 | 0.001 |
| Paper | 0.003 | 0.002 | 0.001 |
| Utilities | 0.005 | 0.004 | 0.001 |
| Educational services | 0.002 | 0.001 | 0.001 |
| Other services | 0.004 | 0.003 | 0.002 |
| Support activities for mining, oil & gas | 0.001 | -0.001 | 0.002 |
| Primary metal | 0.004 | 0.003 | 0.002 |
| Wholesale trade | 0.021 | 0.019 | 0.002 |
| Food, beverage and tobacco | 0.007 | 0.005 | 0.002 |
| Printing and related | 0.005 | 0.002 | 0.003 |
| Mining (exc. Oil & gas extraction) | 0.003 | 0.000 | 0.003 |
| Crop and animal production | 0.006 | 0.001 | 0.004 |
| Oil and gas extraction | 0.005 | 0.000 | 0.005 |
| Retail trade | 0.025 | 0.019 | 0.007 |
| Transportation and warehousing | 0.016 | 0.009 | 0.007 |
| Accommodation and food services | 0.009 | 0.001 | 0.008 |
| Health care and social assistance | 0.001 | -0.009 | 0.010 |
| Sum of industry contributions | 0.25 | 0.25 | -0.00 |
| Reallocation | 0.09 | 0.05 | 0.04 |
| Aggregate labour composition | 0.34 | 0.30 | 0.04 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.

Table A7: Contributions of Multifactor Productivity Growth by Industry to Business Sector Labour Productivity Growth in Canada and the United States, 1987-2010 (percentage points per year)

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|-------|---------------|
| Computer and electronic products | 0.02 | 0.39 | -0.37 |
| Oil and gas extraction | -0.12 | 0.01 | -0.13 |
| Retail trade | 0.06 | 0.17 | -0.11 |
| Transportation and warehousing | -0.01 | 0.08 | -0.09 |
| Wholesale trade | 0.09 | 0.17 | -0.08 |
| Utilities | -0.02 | 0.06 | -0.08 |
| Information and cultural industries | 0.02 | 0.09 | -0.07 |
| Professional service | -0.05 | 0.02 | -0.07 |
| Finance and insurance | -0.01 | 0.05 | -0.06 |
| Administration, waste management | -0.03 | 0.02 | -0.06 |
| Chemical manufacturing | 0.00 | 0.06 | -0.06 |
| Mining (exc. Oil & gas extraction) | -0.03 | 0.01 | -0.05 |
| Accommodation and food services | -0.01 | 0.01 | -0.02 |
| Arts, entertainment and recreation | -0.02 | 0.00 | -0.02 |
| Support activities for mining, oil & gas | -0.01 | 0.01 | -0.02 |
| Petroleum and coal products | 0.00 | 0.01 | -0.02 |
| Clothing, leather and allied products | 0.00 | 0.02 | -0.01 |
| Miscellaneous manufacturing | 0.01 | 0.01 | -0.01 |
| Food, beverage and tobacco | -0.02 | -0.01 | -0.01 |
| Textile and textile products | 0.00 | 0.01 | -0.01 |
| Crop and animal production | 0.06 | 0.06 | 0.00 |
| Wood products | 0.01 | 0.01 | 0.00 |
| Non-metallic mineral products | 0.00 | 0.00 | 0.00 |
| Educational services | 0.00 | 0.00 | 0.00 |
| Furniture and related products | 0.00 | 0.00 | 0.00 |
| Fabricated metal products | 0.01 | 0.00 | 0.01 |
| Other services | -0.01 | -0.02 | 0.01 |
| Forestry, Fishing, and Related | 0.01 | 0.00 | 0.01 |
| Paper | 0.02 | 0.00 | 0.02 |
| Transportation equipment | 0.03 | 0.01 | 0.02 |
| Electrical equipment | 0.00 | -0.01 | 0.02 |
| Machinery | 0.01 | -0.01 | 0.02 |
| Primary metal | 0.03 | 0.01 | 0.02 |
| Printing and related | 0.03 | 0.00 | 0.03 |
| Plastics and rubber products | 0.03 | -0.02 | 0.04 |
| Health care and social assistance | -0.03 | -0.08 | 0.05 |
| Construction | -0.03 | -0.11 | 0.08 |
| Sum of industry contributions | 0.04 | 1.04 | -0.99 |
| Reallocation | -0.06 | 0.01 | -0.07 |
| Aggregate MFP | -0.02 | 1.05 | -1.07 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.

**Table A8: Contributions of Capital Deepening by Industry to Business Sector
Labour Productivity Growth in Canada and the United States, 2010-2014
(percentage points per year)**

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|-------|---------------|
| Information and cultural industries | 0.00 | 0.12 | -0.12 |
| Plastics and rubber products | -0.01 | 0.06 | -0.07 |
| Finance and insurance | -0.08 | -0.01 | -0.07 |
| Crop and animal production | -0.02 | 0.03 | -0.05 |
| Transportation equipment | -0.05 | -0.03 | -0.02 |
| Computer and electronic products | 0.01 | 0.02 | -0.01 |
| Forestry, Fishing, and Related | -0.01 | 0.00 | -0.01 |
| Printing and related | -0.01 | 0.00 | -0.01 |
| Educational services | 0.00 | 0.00 | -0.01 |
| Paper | -0.01 | 0.00 | 0.00 |
| Textile and textile products | 0.00 | 0.00 | 0.00 |
| Petroleum and coal products | 0.00 | 0.00 | 0.00 |
| Furniture and related products | 0.00 | 0.00 | 0.00 |
| Clothing, leather and allied products | 0.00 | 0.00 | 0.00 |
| Non-metallic mineral products | 0.00 | 0.00 | 0.00 |
| Fabricated metal products | -0.01 | -0.01 | 0.00 |
| Wood products | 0.00 | 0.00 | 0.00 |
| Food, beverage and tobacco | 0.01 | 0.01 | 0.00 |
| Miscellaneous manufacturing | 0.00 | 0.00 | 0.00 |
| Accommodation and food services | 0.00 | -0.01 | 0.00 |
| Other services | 0.00 | 0.00 | 0.00 |
| Machinery | 0.00 | -0.01 | 0.01 |
| Electrical equipment | 0.00 | 0.00 | 0.01 |
| Retail trade | 0.02 | 0.01 | 0.02 |
| Arts, entertainment and recreation | 0.01 | -0.01 | 0.02 |
| Construction | -0.01 | -0.03 | 0.02 |
| Health care and social assistance | 0.02 | 0.00 | 0.02 |
| Mining (exc. Oil & gas extraction) | 0.04 | 0.02 | 0.03 |
| Primary metal | 0.03 | -0.01 | 0.03 |
| Support activities for mining, oil & gas | 0.02 | -0.02 | 0.03 |
| Chemical manufacturing | 0.04 | 0.00 | 0.04 |
| Administration, waste management | 0.04 | 0.00 | 0.04 |
| Wholesale trade | 0.11 | 0.02 | 0.09 |
| Professional service | 0.05 | -0.05 | 0.10 |
| Utilities | 0.14 | 0.04 | 0.10 |
| Transportation and warehousing | 0.15 | -0.02 | 0.17 |
| Oil and gas extraction | 0.35 | -0.13 | 0.48 |
| Sum of industry contributions | 0.84 | -0.03 | 0.87 |
| Reallocation | -0.19 | -0.13 | -0.06 |
| Aggregate capital deepening | 0.65 | -0.16 | 0.81 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.

**Table A9: Contributions of Labour Composition by Industry to Business Sector
Labour Productivity Growth in Canada and the United States, 2010-2014
(percentage points per year)**

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|--------|---------------|
| Administration, waste management | 0.007 | 0.120 | -0.113 |
| Information and cultural industries | 0.005 | 0.023 | -0.018 |
| Health care and social assistance | 0.008 | 0.020 | -0.012 |
| Finance and insurance | 0.035 | 0.044 | -0.009 |
| Transportation and warehousing | -0.004 | 0.004 | -0.009 |
| Arts, entertainment and recreation | -0.003 | 0.002 | -0.005 |
| Computer and electronic products | -0.002 | 0.003 | -0.004 |
| Primary metal | 0.000 | 0.003 | -0.004 |
| Oil and gas extraction | -0.001 | 0.002 | -0.002 |
| Wood products | -0.001 | 0.002 | -0.002 |
| Utilities | 0.001 | 0.003 | -0.002 |
| Chemical manufacturing | -0.001 | 0.001 | -0.002 |
| Printing and related | -0.001 | 0.000 | -0.002 |
| Textile and textile products | -0.001 | 0.001 | -0.002 |
| Paper | 0.000 | 0.000 | -0.001 |
| Educational services | 0.001 | 0.001 | -0.001 |
| Furniture and related products | -0.001 | -0.001 | -0.001 |
| Machinery | 0.001 | 0.001 | 0.000 |
| Clothing, leather and allied products | 0.000 | 0.001 | 0.000 |
| Retail trade | 0.007 | 0.008 | 0.000 |
| Fabricated metal products | 0.000 | 0.000 | 0.000 |
| Electrical equipment | 0.000 | 0.000 | 0.000 |
| Petroleum and coal products | 0.000 | 0.000 | 0.000 |
| Mining (exc. Oil & gas extraction) | 0.001 | 0.001 | 0.001 |
| Plastics and rubber products | 0.001 | -0.001 | 0.001 |
| Support activities for mining, oil & gas | 0.002 | 0.000 | 0.002 |
| Accommodation and food services | 0.005 | 0.002 | 0.003 |
| Forestry, Fishing, and Related | 0.001 | -0.002 | 0.003 |
| Miscellaneous manufacturing | 0.001 | -0.004 | 0.005 |
| Non-metallic mineral products | 0.002 | -0.003 | 0.006 |
| Other services | 0.005 | -0.001 | 0.006 |
| Construction | 0.008 | 0.001 | 0.008 |
| Food, beverage and tobacco | 0.011 | 0.004 | 0.008 |
| Transportation equipment | 0.000 | -0.009 | 0.009 |
| Wholesale trade | 0.017 | 0.004 | 0.012 |
| Crop and animal production | 0.013 | -0.001 | 0.015 |
| Professional service | 0.022 | -0.019 | 0.041 |
| Sum of industry contributions | 0.14 | 0.21 | -0.07 |
| Reallocation | 0.00 | -0.04 | 0.04 |
| Aggregate labour composition | 0.14 | 0.17 | -0.03 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.

Table A10: Contributions of Multifactor Productivity Growth by Industry to Business Sector Labour Productivity Growth in Canada and the United States, 2010-2014 (percentage points per year)

| Industry | Canada | U.S. | Canada - U.S. |
|--|--------|-------|---------------|
| Oil and gas extraction | -0.03 | 0.21 | -0.25 |
| Construction | -0.13 | -0.02 | -0.11 |
| Mining (exc. Oil & gas extraction) | -0.13 | -0.04 | -0.09 |
| Transportation equipment | 0.05 | 0.08 | -0.03 |
| Non-metallic mineral products | 0.00 | 0.01 | -0.01 |
| Forestry, Fishing, and Related | 0.00 | 0.00 | -0.01 |
| Primary metal | 0.00 | 0.01 | -0.01 |
| Professional service | 0.12 | 0.12 | -0.01 |
| Support activities for mining, oil & gas | 0.02 | 0.03 | -0.01 |
| Textile and textile products | 0.00 | 0.01 | 0.00 |
| Petroleum and coal products | 0.00 | 0.01 | 0.00 |
| Printing and related | 0.00 | 0.00 | 0.00 |
| Information and cultural industries | 0.02 | 0.02 | 0.00 |
| Chemical manufacturing | 0.02 | 0.02 | 0.00 |
| Electrical equipment | 0.00 | 0.00 | 0.00 |
| Arts, entertainment and recreation | 0.01 | 0.01 | 0.00 |
| Retail trade | 0.04 | 0.04 | 0.01 |
| Accommodation and food services | 0.03 | 0.02 | 0.01 |
| Furniture and related products | 0.01 | 0.00 | 0.01 |
| Utilities | -0.02 | -0.04 | 0.01 |
| Educational services | 0.00 | -0.02 | 0.02 |
| Miscellaneous manufacturing | 0.00 | -0.03 | 0.02 |
| Clothing, leather and allied products | 0.00 | -0.02 | 0.03 |
| Computer and electronic products | 0.00 | -0.02 | 0.03 |
| Crop and animal production | -0.01 | -0.04 | 0.03 |
| Paper | 0.03 | 0.00 | 0.03 |
| Wood products | 0.02 | -0.02 | 0.05 |
| Machinery | 0.04 | -0.01 | 0.05 |
| Other services | 0.05 | 0.00 | 0.06 |
| Transportation and warehousing | 0.04 | -0.02 | 0.06 |
| Health care and social assistance | 0.02 | -0.04 | 0.06 |
| Food, beverage and tobacco | 0.02 | -0.04 | 0.06 |
| Wholesale trade | 0.12 | 0.05 | 0.07 |
| Finance and insurance | 0.28 | 0.21 | 0.07 |
| Fabricated metal products | 0.04 | -0.03 | 0.07 |
| Administration, waste management | 0.02 | -0.16 | 0.18 |
| Plastics and rubber products | 0.04 | -0.22 | 0.25 |
| Sum of industry contributions | 0.72 | 0.07 | 0.65 |
| Reallocation | 0.03 | 0.41 | -0.38 |
| Aggregate MFP | 0.75 | 0.49 | 0.26 |

Note: Authors' calculation using industry productivity databases from Statistics Canada and the Bureau of Labor Statistics. Industries are sorted by Canada-U.S. difference.