

A GUIDE TO COST ADVANTAGE

Competitive Alternatives is the authoritative guide for comparing business costs in North America, Europe, and Japan. This new report is the most thorough comparison of international business costs ever undertaken by KPMG. It contains essential information for any company seeking a cost advantage in locating G7 business operations.



The study measures the combined impact of 27 cost components that are most likely to vary by location, as applied to specific business operations. The 10-month research program covered more than 85 cities throughout Austria, France, Italy, Germany, the Netherlands, the United Kingdom, Canada, the United States, and Japan. More than 1,000 individual business scenarios were examined, through an analysis of more than 30,000 items of data. The basis for comparison is the after-tax cost of startup and operation for 12 specific types of business, over a 10-year time horizon.

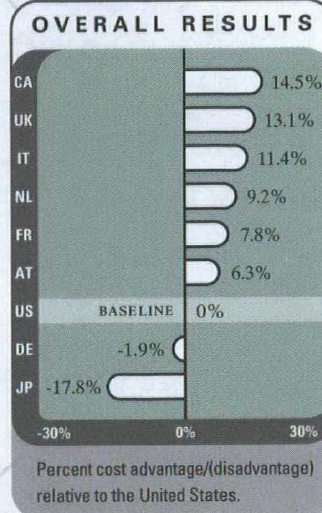
Full study results are available on-line at www.CompetitiveAlternatives.com. The website also features an interactive costing model for more detailed analysis.

THE BOTTOM LINE

- **CANADA (CA)** is the overall cost leader for 2002 with a cost index of 85.5, representing a 14.5% cost advantage over the United States (US = 100.0).
- The **UNITED KINGDOM (UK, 86.9)** is ranked second overall, with costs 13.1% lower than in the United States.
- **ITALY (IT, 88.6)** has improved its 1999 cost position against every other G7 country, due in part to significant reductions in employer costs for legally-required employee benefits.
- The **NETHERLANDS (NL, 90.8)** is new to this study for 2002 and ranks in fourth place, ahead of **FRANCE (FR, 92.2)**.
- **AUSTRIA (AT, 93.7)** has a similar cost structure to France, and has a significant cost advantage over neighboring **GERMANY (DE, 101.9)**.
- The relative cost position of the **UNITED STATES (US, 100.0)** has declined since 1999, due to the appreciation of the US dollar against major global currencies.
- As in 1999, **JAPAN (JP, 117.8)** has the highest business cost structure among G7 countries.

COST TRENDS: BIG GAINS FOR EUROPE

- The competitiveness of all countries in the euro currency zone has improved dramatically with the 24% decline of the euro against the US dollar since early 1999. Most European countries now rank ahead of the US in cost competitiveness.
- Other major currencies have also weakened against the US dollar, allowing all other G7 countries to improve their cost positions relative to the United States.
- Trends have been downward in some cost areas. European utility and telecommunication costs have dropped due to deregulation. In addition, many jurisdictions have implemented significant tax reductions since 1999.



EXCHANGE RATES

Results of this study are sensitive to exchange rates. The rates used in this comparison, per US dollar, are:

CANADIAN \$	EURO €	JAPANESE ¥	UK £
1.546	1.122	121.5	0.695

RESULTS BY INDUSTRY SECTOR

→ DETAILED RESULTS FOR 12 SPECIFIC BUSINESS OPERATIONS...

- Metal components
- Plastic products
- Food processing
- Electronics assembly
- Precision components
- Pharmaceuticals
- Specialty chemicals

- Advanced software
- Content development

- Biomedical R&D
- Electronic systems development/testing

- Shared services center

→ FORM THE BASIS FOR COMPARING INDUSTRY SECTORS...

MANUFACTURING	SOFTWARE	RESEARCH & DEVELOPMENT	CORPORATE SERVICES																																																																								
<p>COST DIFFERENTIALS ARE LOWEST IN MANUFACTURING.</p> <table border="1"> <tr><td>UK</td><td>10.3%</td></tr> <tr><td>CA</td><td>10.0%</td></tr> <tr><td>IT</td><td>9.7%</td></tr> <tr><td>NL</td><td>7.7%</td></tr> <tr><td>AT</td><td>6.3%</td></tr> <tr><td>FR</td><td>6.2%</td></tr> <tr><td>US</td><td>BASELINE 0%</td></tr> <tr><td>DE</td><td>-2.2%</td></tr> <tr><td>JP</td><td>-15.8%</td></tr> </table> <p>Seven manufacturing operations</p> <ul style="list-style-type: none"> • For manufacturers, costs for globally-sourced materials and equipment are significant, and do not vary by location. • The United Kingdom has the lowest cost structure, followed closely by Canada and Italy. • The Netherlands, Austria and France are closely grouped. 	UK	10.3%	CA	10.0%	IT	9.7%	NL	7.7%	AT	6.3%	FR	6.2%	US	BASELINE 0%	DE	-2.2%	JP	-15.8%	<p>COST DIFFERENTIALS ARE HIGHER IN SOFTWARE.</p> <table border="1"> <tr><td>CA</td><td>22.3%</td></tr> <tr><td>UK</td><td>18.6%</td></tr> <tr><td>IT</td><td>12.6%</td></tr> <tr><td>NL</td><td>11.0%</td></tr> <tr><td>FR</td><td>10.5%</td></tr> <tr><td>AT</td><td>4.9%</td></tr> <tr><td>DE</td><td>1.6%</td></tr> <tr><td>US</td><td>BASELINE 0%</td></tr> <tr><td>JP</td><td>-11.9%</td></tr> </table> <p>Two software operations</p> <ul style="list-style-type: none"> • Labor costs are more significant in this sector, and vary considerably by location. • Canada is the overall cost leader, followed by the United Kingdom, Italy, the Netherlands and France. • Japan has its strongest result in this sector. 	CA	22.3%	UK	18.6%	IT	12.6%	NL	11.0%	FR	10.5%	AT	4.9%	DE	1.6%	US	BASELINE 0%	JP	-11.9%	<p>COST DIFFERENTIALS ARE EVEN HIGHER IN R&D.</p> <table border="1"> <tr><td>CA</td><td>30.6%</td></tr> <tr><td>UK</td><td>25.3%</td></tr> <tr><td>IT</td><td>22.8%</td></tr> <tr><td>NL</td><td>21.8%</td></tr> <tr><td>FR</td><td>21.6%</td></tr> <tr><td>AT</td><td>17.3%</td></tr> <tr><td>DE</td><td>6.9%</td></tr> <tr><td>US</td><td>BASELINE 0%</td></tr> <tr><td>JP</td><td>-19.1%</td></tr> </table> <p>Two R&D operations</p> <ul style="list-style-type: none"> • Salary costs for scientists and technicians are a major factor in this sector, and vary dramatically among countries. • Germany has its strongest result in this sector, with a cost structure significantly lower than the United States. 	CA	30.6%	UK	25.3%	IT	22.8%	NL	21.8%	FR	21.6%	AT	17.3%	DE	6.9%	US	BASELINE 0%	JP	-19.1%	<p>COST DIFFERENTIALS ARE HIGHEST IN CORPORATE SERVICES.</p> <table border="1"> <tr><td>CA</td><td>19.7%</td></tr> <tr><td>UK</td><td>10.0%</td></tr> <tr><td>IT</td><td>8.4%</td></tr> <tr><td>US</td><td>BASELINE 0%</td></tr> <tr><td>NL</td><td>-0.9%</td></tr> <tr><td>FR</td><td>-4.2%</td></tr> <tr><td>AT</td><td>-11.8%</td></tr> <tr><td>DE</td><td>-23.4%</td></tr> <tr><td>JP</td><td>-54.2%</td></tr> </table> <p>One shared services operation</p> <ul style="list-style-type: none"> • Corporate services include centralized: <ul style="list-style-type: none"> > account processing; > call center; and > IT support operations. • The United States has its strongest result in this sector, reflecting its relatively low clerical and administrative salaries. 	CA	19.7%	UK	10.0%	IT	8.4%	US	BASELINE 0%	NL	-0.9%	FR	-4.2%	AT	-11.8%	DE	-23.4%	JP	-54.2%
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