The Economic Impact of Canada’s Copyright Industries – Sectoral Analysis

A Presentation to the Society for Economic Research on Copyright Issues (SERCI)
Singapore, June 2006

Presented by Rizak Abdullahi
Presentation Outline
The Impact of Canada’s Copyright Industries

- Background and Methodology
- Overall contribution of core Copyright Industries to GDP, Employment and Trade
- Analysis and key findings by sector: Press and Literature; Theatrical and Music Productions/Opera; Motion Picture and Video Industries; Radio and Television; Software and Databases; Advertising Services; Sound Recording
- Recommended Research
Background and Methodology

- The study produced a quantitative analysis of Canada’s core Copyright Industries in terms of their contribution to GDP (value-added), Employment and Trade
- Study supported by significant qualitative data, to explain findings and identify future trends
- Industry categories based on WIPO-mandated categories, mapped onto the North American Industry Classification System (NAICS); gathered data from Statistics Canada
- Conducted one-on-one interviews with 12 associations and 19 participants; consulted with Copyright Policy Branch, Sound Recording Policy and Programs Directorate and WIPO
- Conducted an e-mail survey of an additional 30 organizations, achieving a 20 percent return
Core Copyright Industries: Contribution to GDP

Contribution to GDP: $46.8B, 4.5 percent of GDP
Contribution to GDP (cont’d)

GDP: Copyright Based Industries - Contribution to Canadian GDP

Percentage of Canadian GDP


0.00% 0.50% 1.00% 1.50% 2.00% 2.50% 3.00% 3.50% 4.00% 4.50% 5.00%

Copyright Based Industries Contribution to Canadian GDP
Core Copyright Based Industries Contribution to Canadian GDP

2.88% 3.06% 3.30% 3.28% 3.44% 3.42% 3.43% 3.33% 4.45% 4.43% 4.65% 4.63% 4.65% 4.62% 4.63% 4.50%
Contribution to GDP (cont’d)

GDP by Sector - 1997 and 2004

<table>
<thead>
<tr>
<th>Sector</th>
<th>1997</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press and Literature</td>
<td>$6,212</td>
<td>$8,016</td>
</tr>
<tr>
<td>Theatrical and Music</td>
<td>$3,939</td>
<td>$4,675</td>
</tr>
<tr>
<td>Motion Picture and Video</td>
<td>$1,715</td>
<td>$2,403</td>
</tr>
<tr>
<td>Radio and Television</td>
<td>$3,774</td>
<td>$4,227</td>
</tr>
<tr>
<td>Software and Databases</td>
<td>$5,768</td>
<td>$12,282</td>
</tr>
<tr>
<td>Advertising Services</td>
<td>$1,840</td>
<td>$2,539</td>
</tr>
</tbody>
</table>

$millions
Contribution to GDP (cont’d)

GDP Copyright Based Industries - Comparative Annual Growth

Canadian GDP

Core Copyright Based Industries
Copyright Industries grew at a faster rate than the Canadian economy between 1997 and 2004 (5.7 percent compared to 3.5 percent)

Key driver: *Software and Databases* at 11.4 percent

Widely perceived period of softening in 2003 and 2004 – but not viewed as problematic by stakeholders

*Software and Databases* has matured, taken on a cyclical pattern

Developments in technology have stakeholders in ‘wait and see’ mode

Skills shortages and lack of sufficient access to capital are continuing concerns
Core Copyright Industries – Contribution to Employment

Employment: Copyright Based Industries in the Canadian Context
(2004 - 000s)

- Public Administration, Education, Health Care, Accomodation and Other, 5,973 (37%)
- Transportation, Wholesale and Retail Trade, 3,303 (21%)
- Finance and Insurance, 985 (6%)
- Agriculture, Mining, Construction and Utilities, 1,741 (11%)
- Manufacturing, 2,269 (14%)
- Information and Cultural Industries, Arts & Entertainment, Professional & Scientific excluding Copyright based Industries, 885 (6%)
- Non-CORE, 229 (1.4%)
- CORE Copyright, 655 (4.1%)
Contribution to Employment (cont’d)

Employment: Copyright Based Industries - Contribution to Canadian Employment

Core as a % of Canadian Employment
Copyright Based Industries as a % of Canadian Economy
Employment by Sector - 1997 and 2004
Contribution to Employment (cont’d)

Employment Copyright Based Industries - Comparative Annual Growth

- CORE Copyright Industries
- Canadian Economy
Contribution to Employment – Key Findings and Trends 1997 – 2004

- Employment in the core Copyright Industries has remained relatively stable in the 1997 to 2004 period; peaked at 4.3 percent in 2001, currently at 4.1 percent
- Cyclical pattern similar to GDP trending is evident; similar softening in 2003 and 2004 also evident
- The impact of technology, shortage/concern over skills sets and lack of access to capital all cited as factors by stakeholders
- Similar to views about GDP, period of softening in employment is not expected to persist
Core Copyright Industries – Contribution to Trade

Imports & Exports by Sector 2004 - Page 1 of 2

- Domestic Exports
- Retained Imports
- Trade Balance

-Written and published works: $-1,960,091
-Film and video: $-22,535
-Sound recording and music publishing: $-6,639
-Visual art: $-175,769
-Architecture: $-1,280
## Contribution to Trade (cont’d)

### Imports & Exports by Sector 2004 - Page 2 of 2

<table>
<thead>
<tr>
<th>Sector</th>
<th>Domestic Exports</th>
<th>Retained Imports</th>
<th>Trade Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>242,381 ($000s)</td>
<td>-1,235,511</td>
<td>317,000</td>
</tr>
<tr>
<td>Heritage</td>
<td>-10,256</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software &amp; video (recorded)</td>
<td></td>
<td>-1,235,511</td>
<td></td>
</tr>
<tr>
<td>Copyright payments</td>
<td></td>
<td>-15,000</td>
<td></td>
</tr>
<tr>
<td>Software royalty payments</td>
<td></td>
<td>317,000</td>
<td></td>
</tr>
</tbody>
</table>

### Chart

The chart shows the contribution of various sectors to trade in 2004, with domestic exports, retained imports, and trade balance values. The sectors listed are Advertising, Heritage, Software & video (recorded), Copyright payments, and Software royalty payments.
Contribution to Trade (cont’d)

Imports & Exports - Total for Core Sectors by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Retained Imports</th>
<th>Domestic Exports</th>
<th>Trade Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>-6.5</td>
<td>3.0</td>
<td>-3.5</td>
</tr>
<tr>
<td>1998</td>
<td>-7.2</td>
<td>3.6</td>
<td>-3.6</td>
</tr>
<tr>
<td>1999</td>
<td>-7.6</td>
<td>4.2</td>
<td>-3.4</td>
</tr>
<tr>
<td>2000</td>
<td>-7.8</td>
<td>4.7</td>
<td>-3.1</td>
</tr>
<tr>
<td>2001</td>
<td>-7.8</td>
<td>4.9</td>
<td>-2.9</td>
</tr>
<tr>
<td>2002</td>
<td>-8.1</td>
<td>5.1</td>
<td>-3.0</td>
</tr>
<tr>
<td>2003</td>
<td>-8.5</td>
<td>5.2</td>
<td>-3.2</td>
</tr>
<tr>
<td>2004</td>
<td>-8.3</td>
<td>5.1</td>
<td>-3.2</td>
</tr>
</tbody>
</table>
Contribution to Trade – Key Findings and Trends

- Given proximity to the U.S., Canada remains a net importer of Copyright Industry goods
- Overall balance of trade deficit in the Copyright Industries for 2003 and 2004: $3.2B
- Trade deficit in the Copyright Industries has eased slightly over the 1997 to 2004 period, having peaked at $3.6B in 1997 and 1998
- Software Royalty Payments and Advertising Services show the strongest surpluses at $317M and $242M respectively
- Prevailing view: trade deficit is extremely difficult to reduce, healthier export sector in the Copyright Industries is mandatory
Analysis by Sector
Press and Literature - GDP

GDP - Press and Literature

<table>
<thead>
<tr>
<th>Year</th>
<th>Press and Literature (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>6,212</td>
</tr>
<tr>
<td>1998</td>
<td>6,965</td>
</tr>
<tr>
<td>1999</td>
<td>7,631</td>
</tr>
<tr>
<td>2000</td>
<td>7,759</td>
</tr>
<tr>
<td>2001</td>
<td>8,316</td>
</tr>
<tr>
<td>2002</td>
<td>8,219</td>
</tr>
<tr>
<td>2003</td>
<td>8,291</td>
</tr>
<tr>
<td>2004</td>
<td>8,016</td>
</tr>
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</table>
Press and Literature - Employment

Employment - Press and Literature

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>83.8</td>
</tr>
<tr>
<td>1998</td>
<td>75.7</td>
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<tr>
<td>1999</td>
<td>84.9</td>
</tr>
<tr>
<td>2000</td>
<td>93.3</td>
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<tr>
<td>2001</td>
<td>85.6</td>
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<tr>
<td>2002</td>
<td>80.1</td>
</tr>
<tr>
<td>2003</td>
<td>92.8</td>
</tr>
<tr>
<td>2004</td>
<td>84.9</td>
</tr>
</tbody>
</table>
Press and Literature – Key Findings

- Cyclical trend and softening in 2003 and 2004 are evident

- Difficulties in accessing capital, changes in book publishing industry structure (concern over succession), and technology all viewed as key influences

- Tendency in industries to ‘wait’ on best available and efficient technologies

- Digital content development and potential new streams of revenue are top of mind, but so is developing predictable rights for digital content
Analysis by Sector
Theatrical and Music - GDP

GDP - Theatrical and Music

$millions

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3,939</td>
</tr>
<tr>
<td>1998</td>
<td>4,051</td>
</tr>
<tr>
<td>1999</td>
<td>4,074</td>
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<td>2000</td>
<td>4,246</td>
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<td>2001</td>
<td>4,364</td>
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<td>2002</td>
<td>4,392</td>
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<td>2003</td>
<td>4,690</td>
</tr>
<tr>
<td>2004</td>
<td>4,675</td>
</tr>
</tbody>
</table>
Theatrical and Music - Employment

Employment - Theatrical and Music

1997: 97.2
1998: 99.1
1999: 93.5
2000: 100.7
2001: 108.0
2002: 119.8
2003: 109.8
2004: 123.8
Theatrical and Music – Key Findings

- ‘Wave-like’ trend evident in GDP and Employment

- Low profit margins contribute to difficulties in accessing financing

- Technology has both added costs (e.g. stage production) and added efficiencies (e.g. marketing strategies)

- No-smoking by-laws viewed as having some temporary effects in venue attendance
Analysis by Sector
Motion Picture and Video - GDP

GDP - Motion Picture and Video

$millions


1,719 1,928 2,070 2,122 2,156 2,358 2,475 2,403

Motion Picture and Video
Motion Picture and Video - Employment

Employment - Motion Picture and Video

![Bar chart showing employment in the Motion Picture and Video industry from 1997 to 2004.](chart.png)
Motion Picture and Video – Key Findings

- Overall upward trends between 1997 and 2003, slight downward trend in 2004

- Perception by stakeholders that the financial sector lacks understanding about the value of rights ownership

- Access to export markets has declined (more domestic production), more international capital required

- Technology is having a major impact – new platforms for content delivery, increases in cost of dramatic productions in High Definition

- Skills development is a high priority – more training opportunities required
Analysis by Sector
Radio and Television - GDP

GDP - Radio and Television

$millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>1997</td>
<td>3,774</td>
</tr>
<tr>
<td>1998</td>
<td>3,696</td>
</tr>
<tr>
<td>1999</td>
<td>3,800</td>
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<td>2000</td>
<td>3,758</td>
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<tr>
<td>2001</td>
<td>3,889</td>
</tr>
<tr>
<td>2002</td>
<td>3,999</td>
</tr>
<tr>
<td>2003</td>
<td>4,160</td>
</tr>
<tr>
<td>2004</td>
<td>4,227</td>
</tr>
</tbody>
</table>
Radio and Television - Employment

Employment - Radio and Television


(000s)

- Radio and Television
Radio and Television – Key Findings

- Very stable sector, cyclical trending over time, modest increases in value-added and employment 2001 to 2004

- Major transformation in business models – new, unregulated competitive platforms, increasing market fragmentation, movement of audiences away from conventional broadcasting services

- Major technology investments required in the next decade (HD and DRB)

- Access to capital less problematic but major investment still an issue due to profit margins; policy review of Commercial Radio underway; television review will occur in near term
Analysis by Sector
Software and Databases - GDP

GDP - Software and Databases

<table>
<thead>
<tr>
<th>Year</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>5,768</td>
</tr>
<tr>
<td>1998</td>
<td>7,061</td>
</tr>
<tr>
<td>1999</td>
<td>9,368</td>
</tr>
<tr>
<td>2000</td>
<td>10,226</td>
</tr>
<tr>
<td>2001</td>
<td>11,337</td>
</tr>
<tr>
<td>2002</td>
<td>11,920</td>
</tr>
<tr>
<td>2003</td>
<td>12,067</td>
</tr>
<tr>
<td>2004</td>
<td>12,282</td>
</tr>
</tbody>
</table>
Software and Databases - Employment

Employment - Software and Database

![Bar chart showing employment in thousands for Software and Databases from 1997 to 2004. The employment figures are as follows: 170.8 (1997), 200.0 (1998), 238.0 (1999), 263.1 (2000), 273.5 (2001), 263.6 (2002), 276.3 (2003), and 270.4 (2004).]
Software and Databases – Key Findings

- Little question this sector drives growth in the Copyright Industries; steady growth to 2003, slight decline in 2004

- Number one concern is access to skills going forward, given shift from hardware to software/services focus in the industry

- Large scale enterprises of dot-com boom have given way to smaller more specialized firms and more targeted markets

- Concern over declining visibility of Canada as a global leader in technology; too few industry stars
Analysis by Sector
Advertising Services - GDP

GDP - Advertising Services

<table>
<thead>
<tr>
<th>Year</th>
<th>Advertising Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1,840</td>
</tr>
<tr>
<td>1998</td>
<td>1,869</td>
</tr>
<tr>
<td>1999</td>
<td>2,219</td>
</tr>
<tr>
<td>2000</td>
<td>2,368</td>
</tr>
<tr>
<td>2001</td>
<td>2,427</td>
</tr>
<tr>
<td>2002</td>
<td>2,366</td>
</tr>
<tr>
<td>2003</td>
<td>2,442</td>
</tr>
<tr>
<td>2004</td>
<td>2,539</td>
</tr>
</tbody>
</table>

$millions
Advertising Services - Employment

Employment - Advertising Services

- 1997: 58.0
- 1998: 64.8
- 1999: 61.4
- 2000: 68.6
- 2001: 72.6
- 2002: 66.5
- 2003: 64.8
- 2004: 68.0

(000s)
Advertising Services – Key Findings

- Like *Radio and Television*, this sector has resisted recent declines experienced by other industries.

- Sector tends to ride success waves of other sectors (e.g. dot-com boom); industry is highly diverse, firms move in and out of the sector, consolidation tends to cycle through the industry.

- Tends to find new streams of revenue, e.g. Internet, product placement in programming, insertion of ads during live sporting events.

- Major concern resides with trends affecting their clientele, since these influence advertising.
Employment in Copyright Industries – Relative Distribution by Province

- For each Copyright Industry, information on the relative distribution of employment by province was collected and illustrated.
- Ontario, B.C. and Quebec lead in Copyright Industry employment numbers overall; somewhat surprisingly, B.C. had the largest relative distribution in three sectors (Press and Literature, Motion Picture and Video, and Theatrical and Music).
- The following illustrates Motion Picture and Video relative distribution of employment by province, and a comparative grouping of employment between Ontario, Quebec and the Atlantic Provinces.
Employment – Relative Distribution by Province for Motion Picture and Video Sector

Motion Picture and Video - Relative Share by Province

- British Columbia: 152%
- Alberta: 65%
- Saskatchewan: 49%
- Manitoba: 61%
- Ontario: 104%
- Quebec: 104%
- Atlantic Canada: 100%
- National Average: 100%
Distribution of Employment – Atlantic Canada, Quebec, Ontario

Distribution of Employment - Atlantic Canada, Quebec and Ontario
(relative to the national average of 100%)

Press and Literature
Theatrical and Music
Motion Picture and Video
Radio and Television
Software and Databases
Advertising Services

Atlantic Canada
Quebec
Ontario
Focus on Sound Recording - GDP

GDP - Sound Recording
(a subset of Motion Picture and Video)

$millions

0

1999 2000 2001 2002 2003 2004
243 261 299 325 348 387

Sound Recording
## Sound Recording - Employment

**Employment Levels – Sound Recording Industry**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>3,377</td>
</tr>
<tr>
<td>2000</td>
<td>3,305</td>
</tr>
<tr>
<td>2003</td>
<td>3,078</td>
</tr>
</tbody>
</table>
Sound Recording – Key Findings


- Consolidation, exit of inefficient firms from sector, reductions in employment and additional revenue to Music Publishers may account for this.

- However, GDP figures should be treated with caution until replicated in the next study.

- Stakeholders have serious concerns with access to capital, new ways of monetizing consumer behaviour via new technology, and skills – but in the area of business management, accounting and legal.
Recommended Research

- The study points to several areas of potential future research:
  - Conduct the study again in 2008 to cover 2005 and 2006
  - Select another sub-sector for a special focus
  - Difficulties in accessing capital by Copyright Industries is a major recurring theme (*A key reason for this is the reluctance of investors to duly consider the economic value of rights*). As a result, it warrants further investigation