

# Introduction of Japanese Printing Industries

October 2010

Japan Federation of Printing Industries  
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# About JFPI

JFPI(Japan Federation of Printing Industries) was established in June 1985 by 10 Printing Industry Associations to promote the enhancement and comprehensive development of printing industries.

**Japan Federation of Printing Industry**  
10 Associates  
10,230 Companies



Affiliated Body	Number of the member companies
Printers Association of Japan	97
All Japan Federation of Printing Industry associations	6,286
Japan Business Forms Association	148
The Japan Graphic Services Industry Association	1,091
Graphic Communications Japan Industry Association	300
All Japan Book Binding Industry Association	1,160
The Japan Federation of Label Printing Industries	672
The Gravure Cooperative Associations of Japan	175
Japanese Screen Printers Association	190
The Japan Glossy Paper Processing Association	111

## Foundation Laying Activities

To cope with issues related to printing industries and improve business environment and management base of members.

## Survey & Research Activities

Provide survey and research to the technical issues related printing industries such as enhancement of printing, IT, standardization, environment etc.) and publish the report.

## JFPI (Japan Federation of Printing Industries)

## Assessment/Certification Activities

Assessment and certification of “Privacy Mark” (personal information protection requirements) and Green Printing. (environmental friendly printing standard)

## Publicity Activities

Promote awareness of printing industries to the society and also establish communication among printing industries.

# Current Status of Japanese Printing Industries

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# Size of Japanese Printing Industries

## Size of Japanese Printing Industries (2008)

- ◆ Shipment Value: Yen 6,904 Billion (-1.5%)  
(\$76.7 B \$1.00=Yen 90)
- ◆ No. of Employees: 354,000 people (-2.8%)
- ◆ No. of Business: 29,700 companies (-9.2%)

Comparison of top 5 countries for Printing

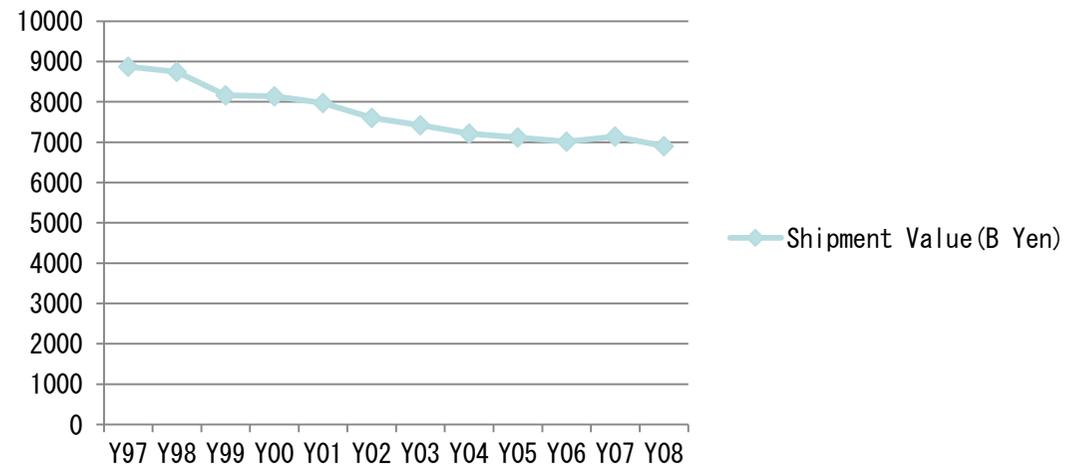
	value	population	per person
USA	182	302	603
Japan	85	128	664
China	41	1325	31
Germany	39	82	476
UK	35	61	574
Year 2006	Billion \$	Million	\$

- Printing is approx 2.0% of entire Japanese industry shipment value.
- But it represent 6.7% of companies and 4.1% of employment, thus it is one the important industry segment in Japan.
- When compared with other top 5 countries with printing shipment, Japan maintain No.2 position in total amount and No. 1 in per person shipment value.

# Trend of Japanese Printing Industries

- ◆ Japanese printing industries are facing gradual decrease in shipment value. Printing industries shipment started to decrease due to
  - Slow economic growth
  - Graying of population
  - Wide spread of internet and mobile handset
  - Price pressure to printing etc.
- ◆ Increase in numbers of bankruptcy  
Due to continued economic depression, the numbers of bankruptcy in 2009 was 174 cases with amount of 55.6 B Yen(\$618M) which is the highest in past 5 years.

Shipment Value (B Yen)



# Trend of Japanese Printing Industries

## ◆ Rotary web presses capacity adjustment

Rotary web press capacity has increased 4 times during past 20 years due to increase of the number of presses and performance improvement of each press. This overcapacity is finally start to ease with the number of presses begin to decrease since 2008.

No. of Commercial Rotary Web Press

year	2003	2004	2005	2006	2007	2008	2009
No. of press	1298	1315	1327	1362	1402	1361	1289

## ◆ Hot attention to e-books and digital contents

New alliances are formed to establish e-book/digital media contents distribution platform.

- Toppan(Printing) + KDDI(mobile operator) + Sony + Asahi Press
- DNP(Printing) + DoCoMo(mobile operator) + Maruzen(book store)

“Association for e-Publishing Solution” has been formed to establish harmonized progress of the industry. The major players for the association are DNP, Toppan and Dentsu(ad agency).

# Features of Japanese Printing Industries

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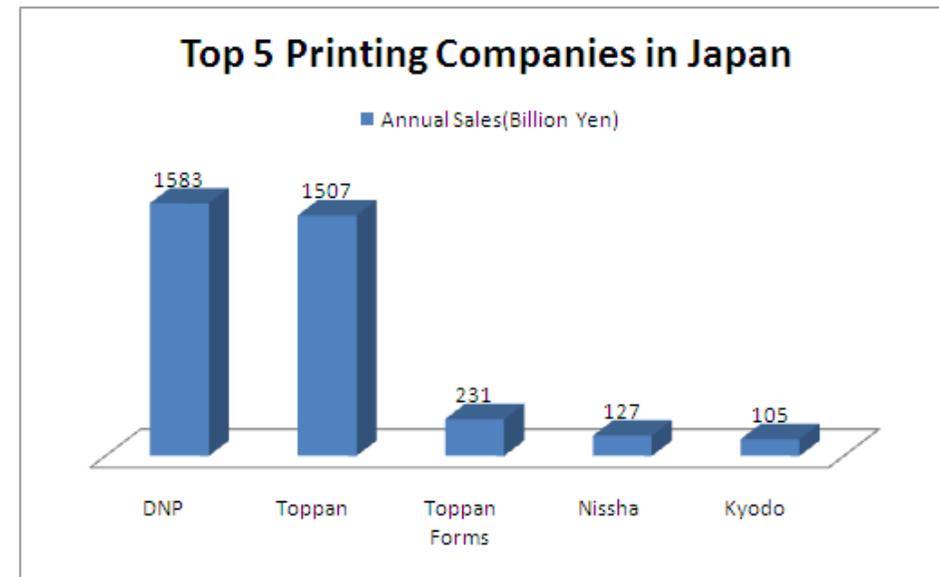
# Features of Japanese Printing Industries(1)

## 1) Diversity of Printing Industries

- Mostly small companies.  
98.6% are company with less than 100 employees.
- Only 1.4% of companies with more than 100 employees generate 44% of value and 26% of employment.
- There are 2 very large scale comprehensive printing companies with annual sales volume of more than 1500 Billion Yen(\$16.6 B).  
These 2 companies have been extending the range of printing.

Comparison of companies below/over 100 people

	No. of companies		No. of employees		Value(Yen billion)	
	company	ratio %	employee	ratio %	value	ratio %
Below 100	32351	98.6	272353	73.3	3976	55.7
more than 100	460	1.4	97244	26.3	3166	44.3



# Features of Japanese Printing Industries(2)

## 2) Urban Oriented Manufacturing Industries

- Printing companies are mostly located in metropolitan or city center area.  
Shipments in Greater Tokyo area=46.3% of the total value, followed by Osaka area=19.1% and Nagoya area=10.8%, ca.80% of the total value of shipments.
- Being located in urban area, printing industries are under strict control for environment. Great effort is made to comply with environmental requirements and also voluntary activities to further satisfy demands from environment conscious customers.
  - VOC(volatile organic compounds)
  - Green Printing (JFPI)
  - E3PA (Environment Pollution Prevention Printing Association)
  - Carbon Footprint

## 3) Commercial Printing and Publication are major business segments

- Commercial Printing is the largest business segment which can be affected by advertisement budget.
- Publication is facing impact of internet and mobile.
- Business Forms are also facing reduction due to more computerization and internet. Data print services for statement, direct mail etc. are increasing.

Business Segment	Share (%)
Commercial Printing	33.2
Publication	30.4
Packaging	13.7
Business Forms, Office Supplies	12.5
Housing Material (decorative printing)	3.4
Security Printing	1.3
Others	5.4

## Features of Japanese Printing Industries(3)

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### 4) Domestic Oriented Industries with Limited Import/Export Influence

- Both import & export decreased in 2008 with limited influence to domestic market.

Import: 106 B Yen(\$1.18B) -7.9%

Export: 56 B Yen(\$ 0.62B) -3.5%

- Import by Segments

Books: 35 B Yen(\$390M) -11.7%

Commercial Printing: 32 B Yen(\$360M) -2.1%

Periodical(magazine/Newspaper) : 13 B Yen (\$140M) -16%

Package: 14 B Yen(\$160M) -8.8%

Business forms & office supplies: 12 B Yen(\$130M) +1.2%



# Status of Publishing & Advertisement Market

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## 1) Publishing Segment

- Market size for book and magazine publishing:
  - 2180 B Yen (\$ 24.2B) -3.2% from previous year
  - 890 B Yen (\$9.9B) for books
  - 1290 B Yen (\$14.3B) for magazines
- Facing with decrease in readership and reduction for advertisement(magazine).  
Influenced by internet, mobile handset and e-book.

## 2) Advertisement Segment

- Entire advertisement market size in 2008:
    - 6700 B Yen (\$74.4B) -4.7% from previous year
  - News paper insert is No.3 advertisement material (616B Yen \$6.8B) with 9.2% of ad market after TV (1,909 B Yen \$21.2B) for 28.5% and news paper (828B Yen \$9.2B) for 13.5% but start to decrease since 2007.
  - Free paper and Direct Mail also indicated decrease since 2007
    - QTY for Free paper in 2005: 10 billion copies(vs 2.4 billion for magazine)
    - Free paper sales 368B Yen (\$4.1B) in 2007, decreased to 354B Yen (\$3.9B) in 2008(-3.8%) due to decrease in advertisement and also material cost increase.  
(getting more difficult to maintain business model based on advertisement income.)
  - DM market in 2008 was 443 B Yen(\$4.9B) -2.4% from previous year
  - Catalog for mail order sales was 112 B Yen (\$1.2B) in 2007 vs 240 B Yen (\$2.7B) in 2004 due to internet usage.(mail order business itself is increasing)
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# Various printed material for advertisement

## ◆ Photo of News paper inserts (Housing Ad)



# Various printed material for advertisement

- ◆ Photo of News paper inserts (Electronics store & Super market)



# Various printed material for advertisement

Free paper (distributed at stations or convenience stores etc.)



# Expanding Fields of Printing (1)

1) Two dominant Japanese printing companies have been expanding fields of printing not seen in other countries.

Company	Annual Sales(\$B)	Information Communication					Package/Housing/Industrial			Electronics		
		Commercial	Book	Forms	statement outsource	plastic/smart card	Packaging	Decorative material	Industrial	Lead frame	screen	photomask
DNP	17.6	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Toppan	16.7	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Donnelley	9.9	yes	yes	yes	yes	-	-	-	-	-	-	-
Quad Graphics	4.8	yes	yes	-	-	-	-	-	-	-	-	-



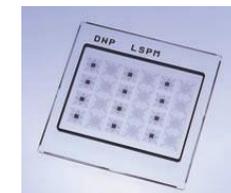
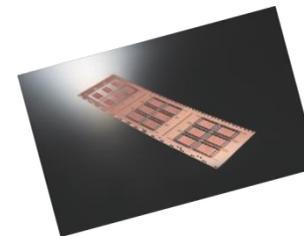
## Expanding Fields of Printing (2)

2) Business volume for non-traditional printing now account for 40-50%.

Business Segment	DNP	Toppan	Example of Products
Information Communication	46.3%	59.4%	Commercial printing, book/magazine, forms, statement outsourcing, plastic card, smartcard
Package/Housing/Industrial	33.6	24.3	paper & flexible packages, decorative transfer paper for housing material, ink film for printer, solar cell component
Electronics	16.1	16.3	LCD color filter, lead frame, photomask, PC board, MEMS(Micro Electro Mechanical Systems)
Others	3.9	-	others

3) New business fields are established with basic printing technologies as its backbone.

- Gravure printing technologies:
  - Decorative transfer paper for housing material
  - Ink film for printer
- Etching technologies for gravure cylinder making:
  - Shadow mask (before LCD color filter)
  - Lead frame
  - Photomask



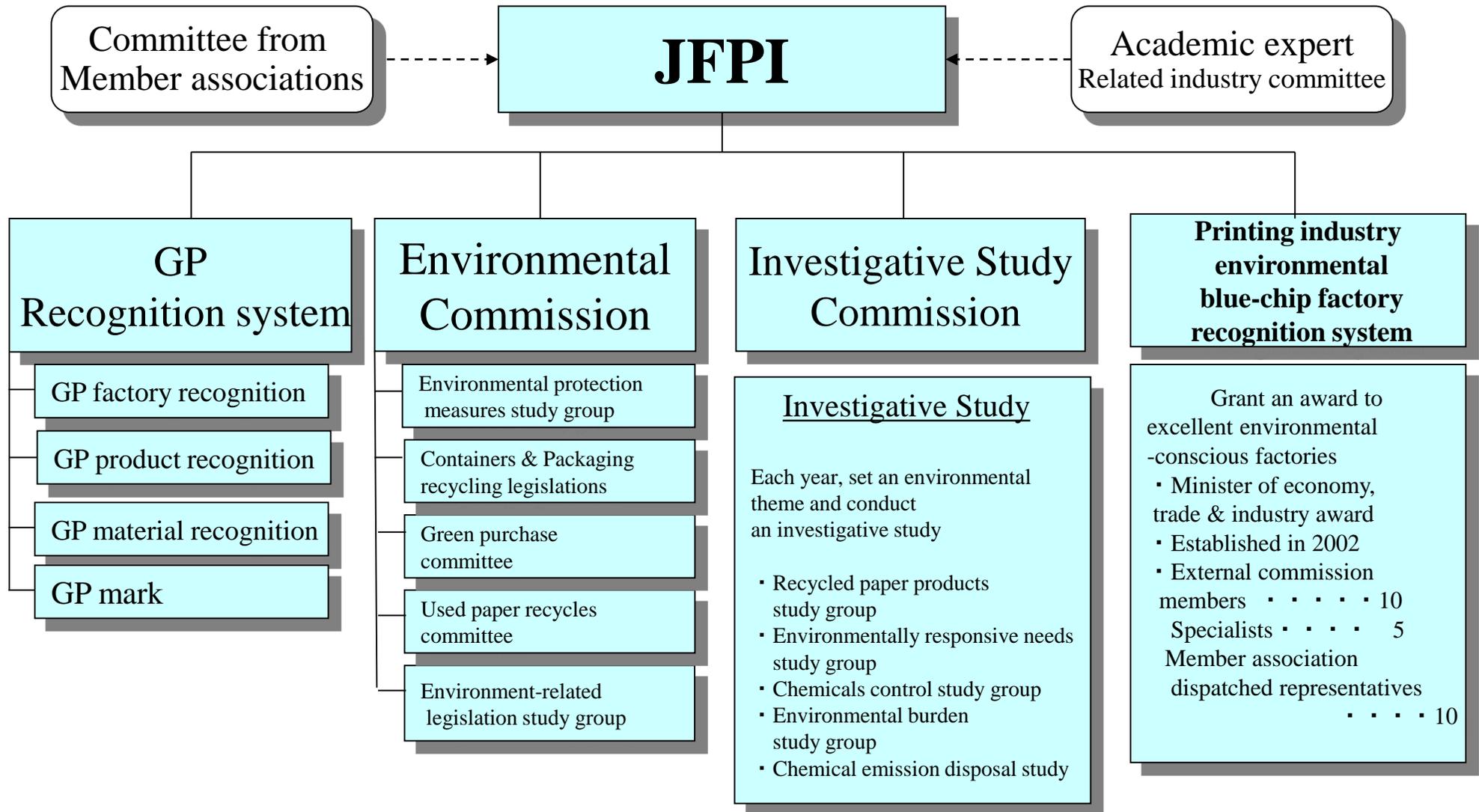
# Environmental Requirements

Environment protection is an industry-wide issue and followings are major activities of Japanese printing industries.

- Regulations promoting a recycling society
  - Promotion of 3R (Reduce, Reuse, Recycle)
  - Amendment of the Container and Packaging Recycling Act
  - Promotion of used printing paper recycling
- Efforts to protect the earth's environment
  - Countermeasures for global warming (energy save, carbon foot print)
  - Response to the Amended Air Pollution Prevention Act (VOC discharge control measures)
- Risk management
  - Management of chemicals, risk communication, etc. (i.e. PRTR: Pollutant Release and Transfer Register )
  - <http://www.env.go.jp/en/chemi/prtr/prtr.html>



# JFPI Environmental Organization



# Printing Education in Japan

# Printing Education in Japan

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- ◆ No dedicated educational institution specialized in printing.
- ◆ Education in university/high school for printing has been decreasing and more emphasis for graphic design, imaging technology, holography, photo-polymer etc.
- ◆ Most people learn printing after they obtain job in printing company as on-the-job training(OJT) base.
- ◆ Large printing companies have its own internal education center.
- ◆ Smaller companies rely on OJT and training courses provided by press and other equipment vendors.
- ◆ Skill required has been more IT intensive as many processes are shifting to digital process and implementation of Digital Press has been increased.
- ◆ Printing association like JAGAT also provide educational courses.  
(<http://www.jagat.or.jp/about/index-e.htm> )



Thank you very much for your attention.

