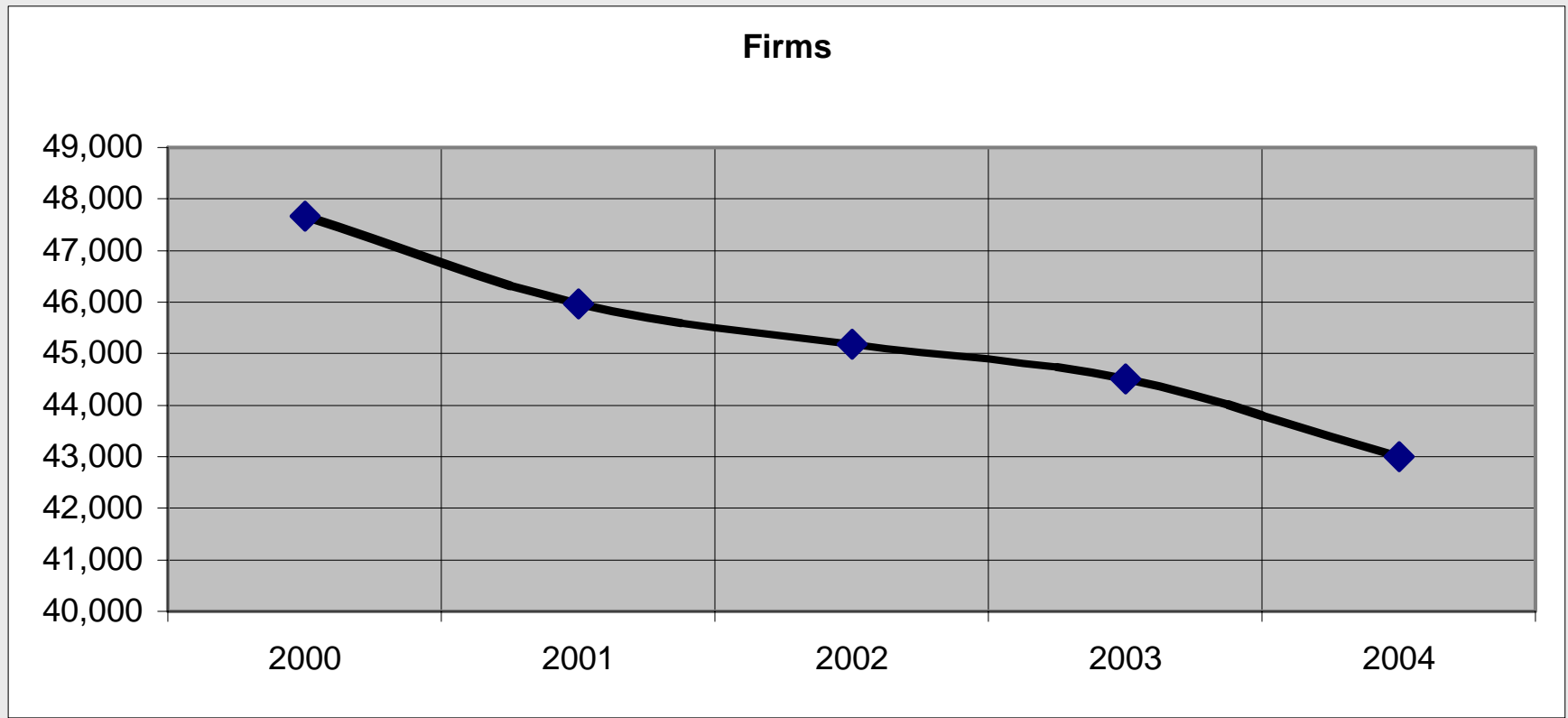


Digital Printing and the Future of Print

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Decline in printing firms



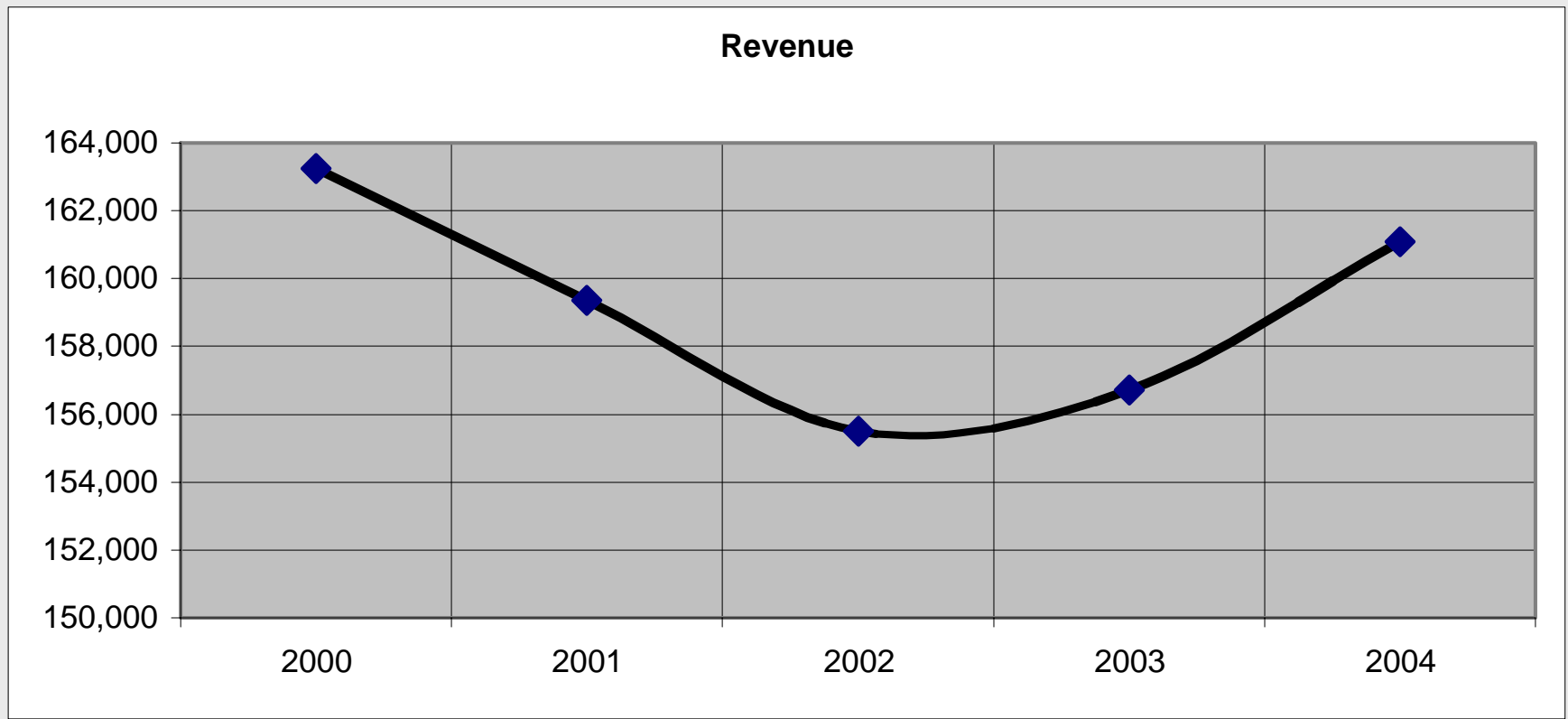
A little history and a little future

- **62,000 firms in 1995**
- **43,000 firms in 2004**
- **30,000 firms in 2010**

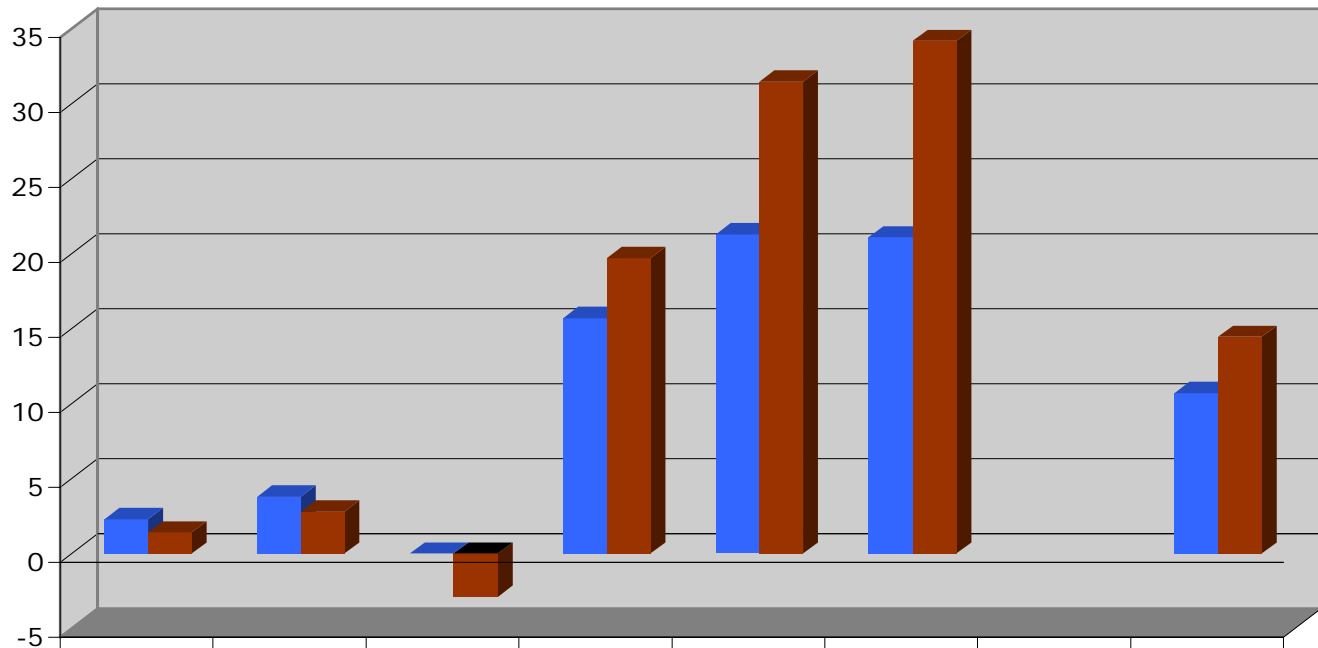
Employment leveling off



Industry revenue surges



Where is the growth?



	Offset Litho	Flexo	Gravure	Digital (page)	Digital (wide format)	Ancillary services		Average
■ 2000-2004	2.3	3.8	0	15.7	21.3	21.1		10.7
■ 2004-2008	1.4	2.8	-2.9	19.7	31.5	34.2		14.5

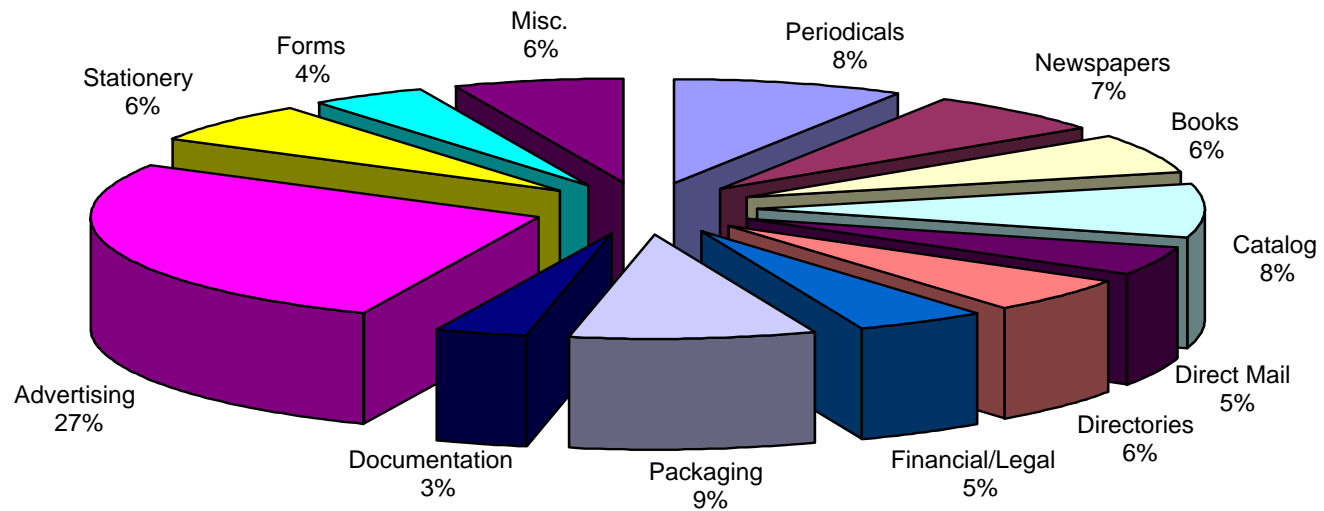
How/Where is print produced?

	Copier	Printer	Press
Factory			
Big printers	Š	3.00%	34.00%
Medium printers	Š	1.50%	18.00%
Small printers	2.00%	1.50%	13.00%
Other copy shops	1.00%	Š	1.00%
Others	1.00%	Š	Š
	4.00%	6.00%	66.00%
Office (+Inplant)			
Departmental	3.00%	3.50%	0.00%
Centralized	3.00%	4.50%	5.00%
	6.00%	8.00%	5.00%
Home			
Home office	0.25%	1.00%	Š
Personal	0.25%	2.00%	Š
	0.50%	3.00%	Š
Other	0.50%	1.00%	Š

How *will* print be produced?

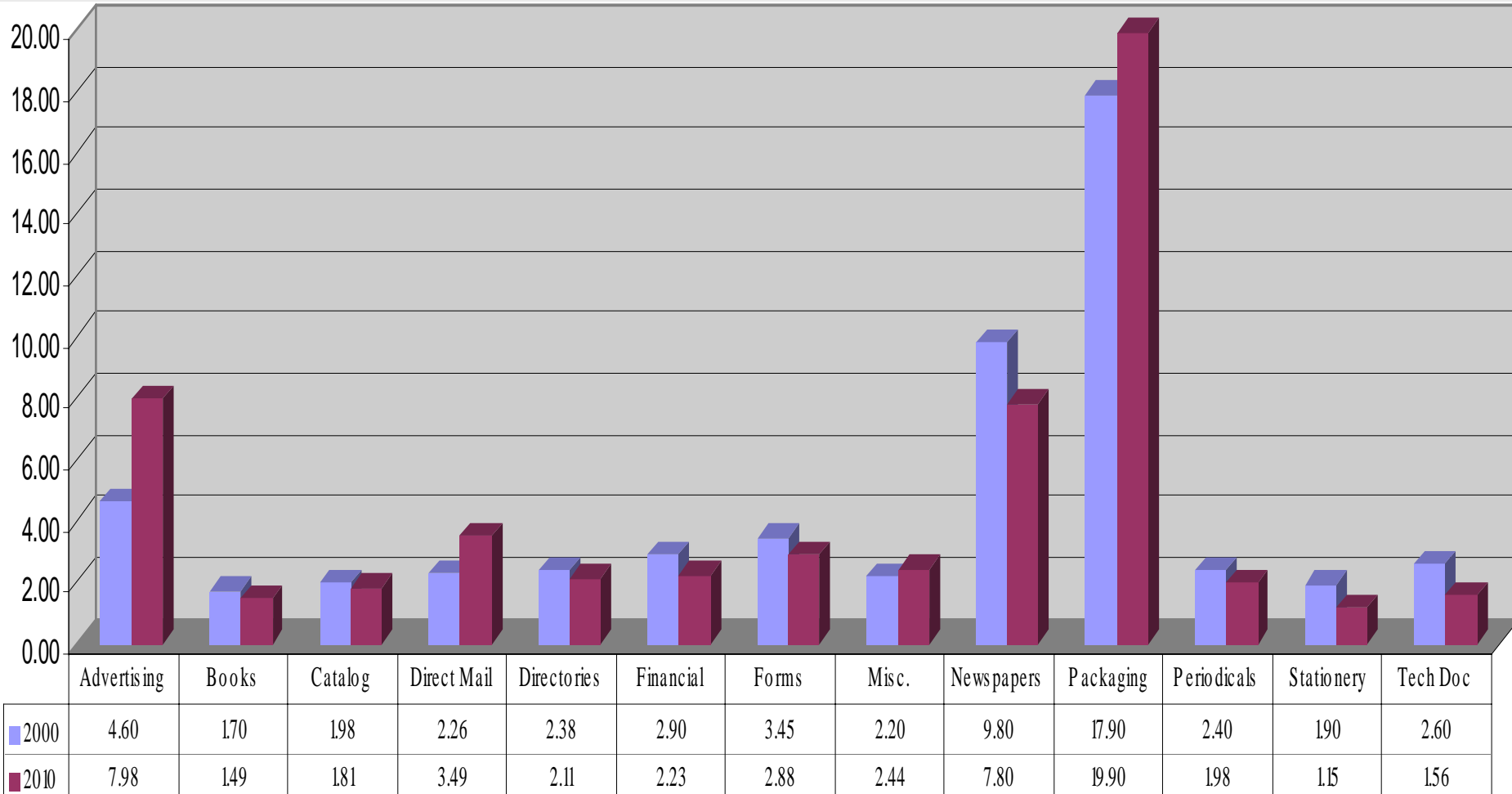
	Copier	Printer	Press
2000	11%	18%	71%
2010	2%	41%	57%
2020	0	48%	52%

Print products



The future of the printed product

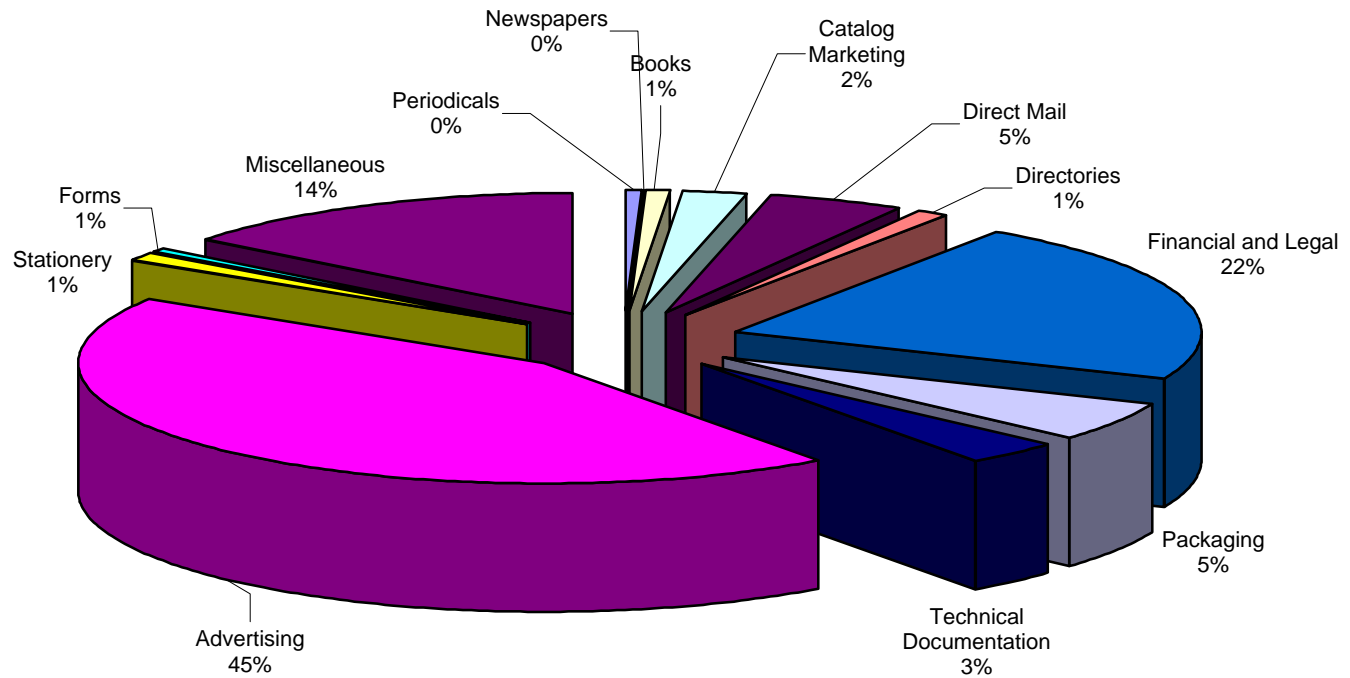
Millions of tons of paper



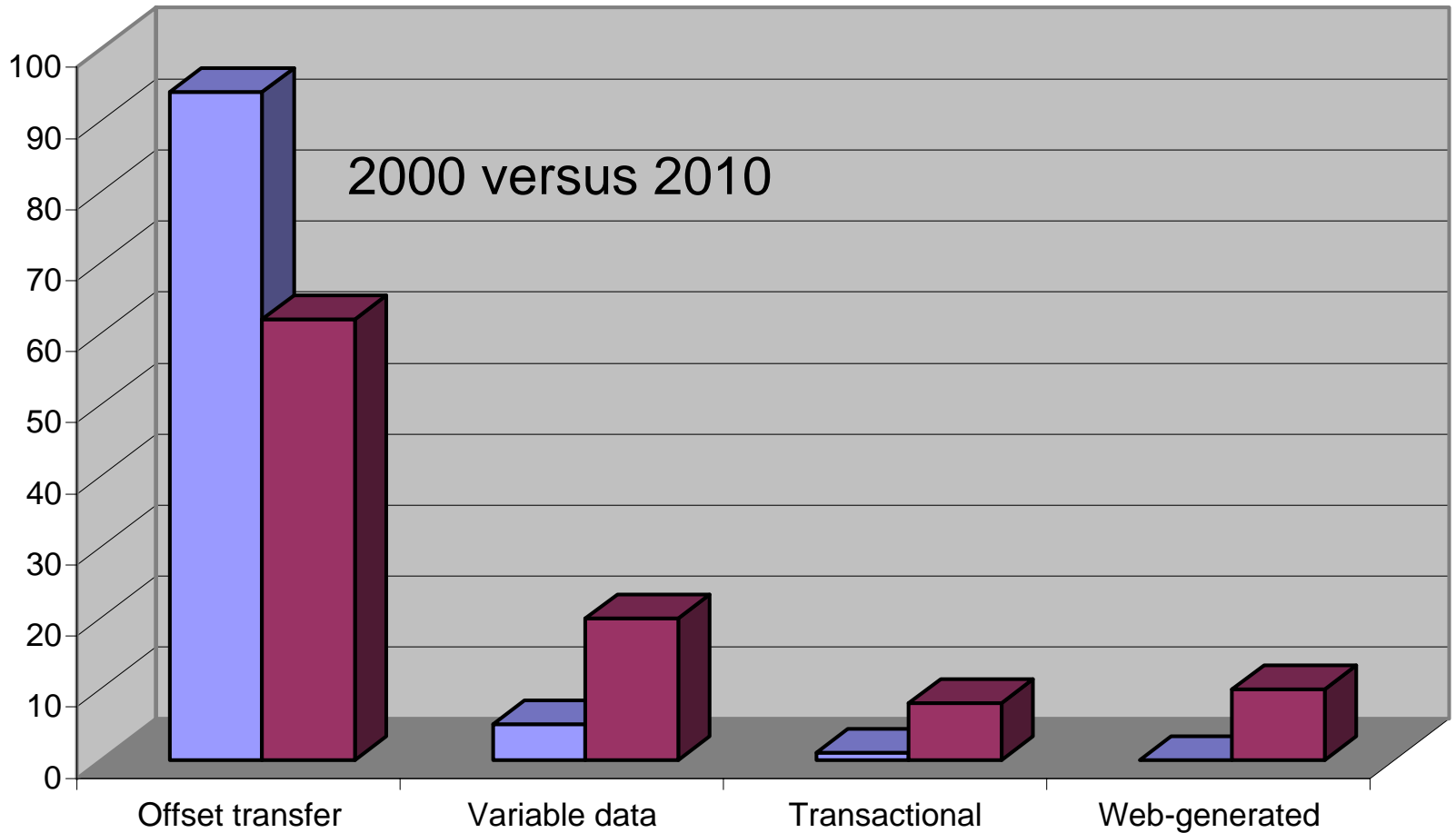
Digital Printing

- **Toner (dry and liquid)**
- **Ink jet (CIJ and DOD)**
- **Hybrid printing**
- **Paper trends**

Digital printing products



Digital printing volumes



Macro trends

- **Technological change will challenge the printing industry to develop new opportunities.**
- **Printed electronics will become one of those opportunities.**
- **Competition for advertising dollars by other media will increase.**
- **Demographic changes accompany on-coming generations.**
- **Short runs are now dominant.**
- **Hybrid printing growing.**