



Michigan Forest Products Council
Business Advocacy for the Forest Products Industry

**TRENDS IN MICHIGAN'S FOREST
PRODUCTS INDUSTRY
2000-2004**

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Executive Summary

Michigan leads the nation in timber surplus – that amount of new annual forest growth that is not harvested according to US Forest Service statistics. Clearly fiber supply is available, yet it is not currently being managed across the state in a manner to effectively utilize the resource for the social, economic, and environmental well-being of Michigan’s residents. Passing the MI Forest Legislative Package is a vital component to sustain Michigan’s forests in the 21st Century.

Michigan’s forests contribute significantly to the social, economic, and environmental well-being of its citizens. There are over 1,400 forest products manufacturing facilities in Michigan, with more than an additional 1,700 business units related to forest products manufacturing (logging companies, consulting foresters, wholesalers). One out of every ten manufacturing jobs in Michigan is accounted for by the forest products industry. When considering direct and indirect effects of the industry on the state’s economy, the total economic benefit of the forest products industry is greater than \$11 billion and represents over 150,000 jobs. The value of Michigan’s forests can be divided into distinct sectors – manufacturing, timber lands, and forest recreation. In most rural communities, the forest products industry is the leading employer and largest economic contributor.

Despite this important role that the forest products industry plays in Michigan’s economy, the industry has suffered as a direct result of the economic downturn in Midwest manufacturing of the past several years. The direct result of this downturn has been the loss of over 20,000 jobs, \$700 million in wages and over 300 individual businesses/manufacturing facilities from the forest products industry. Indirect losses amount to much more when considering the loss of jobs, wages, and businesses related to the procurement, manufacture, and distribution of wood-based products.

The forest products industry’s stability is vitally important across the state, but especially critical in maintaining healthy economies in the rural communities that rely on the forest products industry.

Introduction

This report highlights the important role Michigan's forest products industry plays in the state's environment and economy, and uncovers economic trends within the industry between 2000 and 2004. Data used in this report was obtained from publicly available economic data sets developed and maintained by the state of Michigan and the United States government. This report was prepared by the Michigan Forest Products Council (MFPC), which actively promotes the forest products industry in Michigan. The mission of the MFPC is to promote, protect, and sustain a globally competitive forest products industry in Michigan.

The Forest Products Industry in Michigan

The forest products industry is one of Michigan's oldest industries and includes logging, professional services, pulp and paper, lumber and solid wood products, and wood furniture. It also includes various related businesses such as trucking, machinery construction, building construction, forest nurseries, and wood product wholesaling. Forestry has been an integral part of Michigan's economy for over 150 years, and the state was the nation's leading lumber producer between 1869 and 1900. The early timber industry was spurred on by the demands of the mining and automobile industries. Early cars incorporated as much as 250 board feet of lumber into their manufacture, and Ford Motor Company owned over a half-million acres of timber land in the Upper Peninsula around the turn of the century.

By 1900 many people in the United States were concerned with the condition of the forests. In Michigan, large-scale land conversion turned once forested areas into farms and homesteads. The ever-growing demands for timber of various industries encouraged intensive logging that was focused on short-term economic gains rather than long-term benefits. As a result, agencies such as the United States Forest Service, the Michigan Forestry Commission, and the

Michigan Department of Conservation were formed. Tree nurseries developed during this time, and the first state forester was appointed in 1904. Michigan State University's forestry program was developed during 1902, making it the oldest undergraduate forestry education program in continuous existence. The notions of sustainable forest management first taught at these schools continue to guide the forest products industry to this day.

Of the manufacturing sectors within the forest products industry, furniture manufacturing (NAICS 337) accounts for the greatest number of employees, annual wages, and facilities. Paper manufacturing (NAICS 322) has the second-greatest number of employees and annual wages, while wood products manufacturing (NAICS 321) has the third highest number of employees and annual wages, and the second-greatest number of facilities. Wholesaling of manufactured wood and paper products as well as furniture accounts for a significant amount of the statewide forest products industry in terms of number of facilities, employment, and annual wages.

Based on available data, logging and forestry support activities appear to be relatively small portions of the forest products economy in terms of jobs, annual wages, and number of businesses; however, this is due to two primary reasons. The first reason is that many of these businesses are sole proprietorships or family-run businesses that are exempt from state labor reporting requirements (i.e., they do not pay into workman's compensation programs), so the reported values for each category are likely underrepresented. The second reason is that despite this under-representation, fewer employees and businesses are typically involved with the procurement and extraction of natural resources compared to the capital investment in terms of money and people involved with the secondary processing of these resources into finished goods (e.g., milled lumber, paper, furniture). Thus, a relatively small economic investment in procurement and extraction fuels a

multi-billion dollar industry that continues to be of great importance to Michigan's economy.

When looking across manufacturing categories, the forest products industry provides 10% of the manufacturing jobs in Michigan.

Economic Impact

Michigan's forests contribute significantly to the social, economic, and environmental well-being of its citizens. The economic contribution includes employment opportunities and the production of market and non-market goods. Timber products and forest-based recreation and tourism are the two primary components of the state's forest-based economy. Appendix A of this report contains economic impact data for the forest products industry in Michigan.

The forest products industry continues to be Michigan's fourth largest manufacturing industry (behind the transportation equipment, metals, and machinery manufacturing industries, which together primarily are representative of the automobile and related industries), employing over 66,000 Michiganders with an annual payroll of \$2.9 billion. There are over 1,400 forest products manufacturing facilities in Michigan, with more than an additional 1,700 business units related to forest products manufacturing (logging companies, consulting forestry firms, wholesalers). When applying an economic multiplier that takes into consideration the direct, indirect, and induced effects of the timber industry in Michigan, the total economic benefit of this industry is greater than \$11 billion and represents over 150,000 jobs.

The value of Michigan's forests can be divided into two distinct sectors - timber lands and forest recreation. It is difficult to develop an estimate of the value of Michigan's forests though since timber prices are set by market supply and demand and fluctuate along with the market. One estimate of the value of timberland can be developed by considering the 2.2 million acres enrolled in the state's commercial forestry (CF) program. A recent large forested land sale netted a value of approximately \$400 per acre; thus

applied to just the CF acreage, a value of \$880 million is obtained. Thus, the land value derived from economic goods alone adds a significant figure to the \$11 billion value of Michigan's forest products industry.

Forest-based recreation represents a non-market, non-tradable service and many economic methods are available to generate estimates of the value of ecological services, such as recreation. The data required by these methods are not readily available at this time and such an analysis goes well beyond the scope of this report. Direct market impacts of forest-based recreation and tourism can, however, be estimated by examining the amount of capital that flows through communities that are directly linked to forest-based recreation and tourism. These estimates vary, and some are partially captured in the value-added multiplier mentioned above. In 1994, Michigan DNR estimated that forest-based recreation and tourism have supported approximately 50,000 jobs and added \$3 billion to the state's economy.

The forest products industry impacts every county in Michigan either through direct participation in the harvest of wood or manufacture of goods derived from timber. Many rural communities are dependent on the forest products industry. Several research reports have cited that the strongest rural economies are found in those communities that combine a vibrant forest-based tourism and recreation business with a healthy forest products industry. In many communities, the forest products industry is the leading employer and largest economic contributor.

Current Status of the Industry

Like many basic manufacturing industries in the United States, and specifically the Midwest, the extended economic downturn has had a dramatic, adverse impact on the forest products industry in Michigan and across the nation. Additionally, as has occurred in other states, Michigan has lost forest products sector jobs to other states for a variety of reasons, including energy costs, tax

incentives, labor costs, overall business climate, aging facilities, and global competitiveness.

The direct result of this economic downturn in Michigan's forest products industry has been the loss of over 20,000 jobs, \$700 million in wages, and over 300 individual businesses/manufacturing facilities. Indirect losses amount to much more when considering the loss of jobs, wages, and businesses related to the procurement, manufacture, and distribution of wood-based products, as well as the overall loss of individual wealth and spending power as jobs are lost and the forest products sector loses economic value. The data and graphs in Appendix A paint a disturbing picture of the current state of Michigan's forest products industry; however, just as conservationists looking at the altered Michigan landscape of the early 1900s needed to take positive steps to revive the forest-based economy, we must do the same today.

Throughout the recent manufacturing decline in Michigan, the automobile industry has seen great fluctuations in employment, production, and economic value. Facilities have been closed and jobs lost through mergers and acquisitions, displacement of jobs to other states and countries, as well as corporate consolidation. The raw materials that fuel the automobile industry are generally sourced from outside Michigan's borders. While the forest products industry has seen a steady decline during this same time, that decline has been proportional to overall losses in all manufacturing sectors combined, indicating a relatively stable industry that responds in a consistent manner with general economic trends. This stable decline has occurred during a time when the forest products industry in Michigan has faced some serious challenges – loss of business and fiber supply constraints. With additional support for this key industry, forest products could reassert a dominant position within the state's economy.

The raw materials required for the forest products industry are renewable, and when

managed properly can contribute to a continually strong forest-based economy. While there is not an exact number for the amount of Michigan-grown timber used by Michigan forest products manufacturers, it is estimated that approximately half of the timber supply is procured from in-state sources. In these cases, value is added at each step of the supply chain, from stump to finished product as Michigan companies harvest, transport, mill, and ship timber and timber-derived products around the state, the country, and the world. Few manufacturing industries are able to add value to local businesses throughout the supply chain, and the forest products industry can do this while sustainably managing a renewable resource.

Despite these components that clearly make the forest products industry advantageous to the state's economy, Michigan continues to lose jobs and revenue from this sector. Over 575 Michigan forest products industry jobs were lost just during July 2005, in addition to the thousands lost over the past five years. One million acres of land and numerous mills are up for sale. Businesses are scaling back operations or relocating altogether in part due to fiber supply constraints and the cost of doing business in Michigan.

The components of the forest products industry that are left in Michigan can not only be retained, but grown as well. Timber supply is readily available as Michigan has the greatest amount of net growth in excess of timber removals in any state; however, there remains an unwillingness to harvest on public and private lands. According to a recent economic analysis of timber supply and demand in Michigan, this surplus represents the annual needs of 10 to 15 modern pulp mills. Despite this potential market for surplus timber supply, stumpage continues to increase faster in Michigan than in other states and regions of the world (as demand currently outpaces supply), the state's forest products industry runs the risk of facing a cost structure that prevents it from being competitive in the global marketplace. This tremendous supply advantage needs to be

leveraged to not only retain existing businesses, but to attract new businesses to the state as well.

Michigan's Forestland

As of 1993, Michigan had over 19 million acres of forested land – over 50 percent of our state is forest. That represents a 5% increase over 1980. Michigan also has 18.6 million acres of timberland – an increase of 7% since 1980. Michigan's timberland acreage is the fifth largest in the United States, exceeded only by the states of Georgia, Oregon, Alabama, and North Carolina. These forests provide a variety of environmental and economic benefits to the residents of Michigan.

Ownership of the state's forests reflect a diverse cultural value system of individuals and institutions involved in good stewardship of these resources with 65% owned by the private sector (private owner 57% and corporate 8%), and 35% controlled by the public sector (21% state and 14% federal). Collectively, all of this forested land, regardless of ownership, provides a wealth of ecological services to our state including clean water, clean air, wildlife habitat, and recreational opportunities.

The most recently compiled forest inventory statistics (1993 Michigan DNR and US Forest Service inventory) show that Michigan's forests are productive and sustainable and continue to provide a variety of goods and services. Forest management activities have resulted in a maturing forest resource, increasing in both tree size and age.

Sawtimber sized tree stands now comprise 46% of the timberland acreage; poletimber and seedling/sapling tree stands comprise 30% and 24% respectively of the timberland acreage. Michigan's temperate forests contain a diverse mix of tree species in an equally diverse forest association mix. The hardwood forest associations that comprise 75% of the total timberland acreage base include maple-beech-birch, aspen-birch, oak-hickory, and elm-ash-soft maple. Principal softwood forest associations

include red-white-jack pine, spruce-fir, and northern white cedar. The growth in timberland acreage since 1980 has been led by the maple-beech-birch forest association.

Along with environmental benefits, our growing and maturing forests provide the basic raw materials for the states most important industry behind the automobile-metals-machinery industrial complex – the forest products industry. Consumption of timber and products manufactured from timber is a global fact of life. The U.S. is the world's leading consumer of forest products. Each person in America uses an average of over 13 pounds of wood products each day. Globally, each person on earth uses about 4.5 pounds of wood products each day. From the lumber used to build our homes to the paper used to print newspapers and books we read every day, to medicines, clothing, and food, forest products are and should remain an important part of our lives.

The Future of Michigan's Forests

The demand for wood products gives economic value to forestland and provides an economic incentive for landowners to keep their land in timber production. This very simple and intuitive notion is threatened today wherever the forest products industry is declining. The decline in the forest products industry in Michigan is certainly a threat to the future of the state's forestlands. Conversion of forests to non-forest use is a threat to long-term forest sustainability, but strong markets for wood provide critical incentives for landowners to keep their land in forest production.

Clearly if the forests lose their economic value to the people that own them, we run the risk of losing forested land. Landowners may feel compelled to convert their land into other uses that are more economically viable. It is essential that the state and the forest products industry itself take immediate and positive action to support this industry and the challenges that face it.

Recommendations

The recommendations that follow are priorities for the forest products industry and if implemented, will demonstrate that Michigan is serious about supporting this key industry, and where possible, expanding the production of forest products within the state. This will in turn support continued investments by private landowners (both industrial and non-industrial) in forests that will support environmental and economic goals developed by the state of Michigan.

Specific recommendations are listed below:

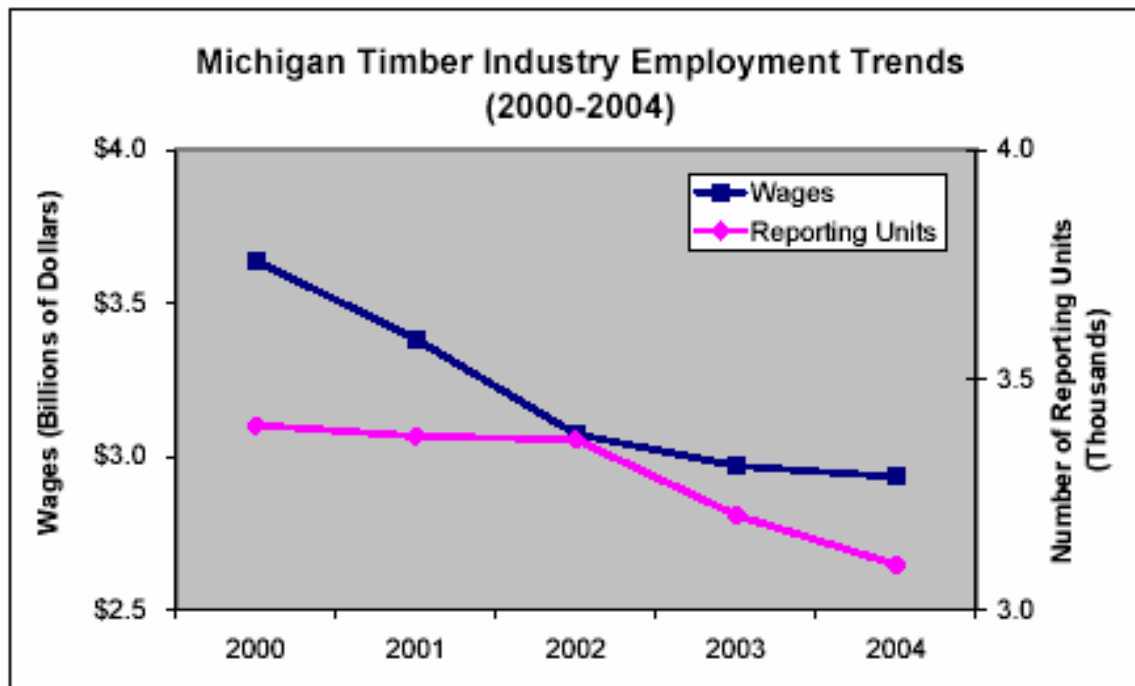
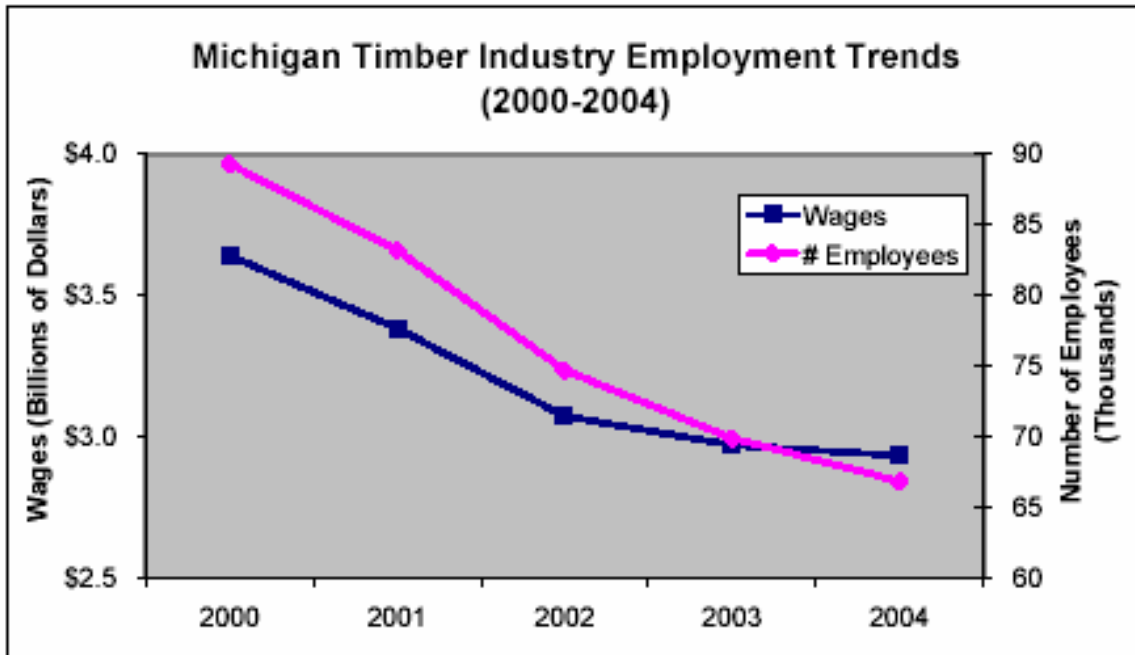
- Develop a policy on the importance of the forest products industry to Michigan's environment and economy, and the Governor's intent to help promote and grow that sustainable industry.
- Support the \$20 million capitalization of the Forest Finance Authority's forest development fund. Appoint MEDC officials to staff the Authority. Michigan has a sizable, comparative advantage in terms of its fiber supply position by having the greatest amount of net growth in excess of timber removals of any state. Therefore, this plays a major role in attracting billions of dollars in investment to attract both domestic and international wood products forms to Michigan, both today and into the future.
- Focus special attention on the forest products industry and promote this industry within the DNR and other state agencies.
- Work with the Administration and Michigan Legislature to create a stable

regulatory climate that will encourage forest products businesses to remain in Michigan. Forest management plans, state certification, factor limit reforms, and department-industry partnerships in value-stream mapping are important in this regard.

- Adequately fund the Forest, Mineral and Fire Management Division of DNR to implement a state-of-the-art GIS-based forest inventory system to provide updated forest resource data to the forest products industry and natural resource management agencies and organizations. Moreover, provide an exception to state hiring rules to attract the best talent to Michigan's vacant State Forester position, and give that person the appropriate authority and responsibility over the largest dedicated state forest system (four millions acres) in the United States
- Publicize and promote existing incentives, programs, and services available to existing and potential forest products businesses.
- Immediately meet with the Department of Agriculture to coordinate with and support its international marketing program for forest products and seek ways to support and improve this effort.
- Adopt a position calling for the US Forest Service to improve management of Michigan's three National Forests. This should include providing adequate annual sales quantities of timber to support businesses, and future business growth, in Michigan.

Michigan Forest Product Industry Trends 2000-2004

Appendix A – Economic Impact Data for the Michigan Forest Products Industry



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Economic Impact of the Forest Products Industry in Michigan

➤ Number of reporting units, 2004 ¹	3,098
➤ Number of forest product sector employees, 2004 ¹	66,838
➤ Number of private landowners ²	312,500
➤ Acres of forest land (all categories), millions ³	19.3
Federal	2.7
State	3.9
Private (NIPF and corporate)	10.5
Enrolled in DNR CF program	2.2
Industrial	1.5
Other (tribal, other government)	0.7
➤ 2003 contribution to state gross product ⁴ , \$billion	
Forest products industry	4.5
All manufacturing	74.4
➤ Wages, 2004 ¹ , \$billion	2.9
➤ Capital expenditures ⁵ , \$million	281
➤ Value of shipments ⁵ , \$billion	12.8
➤ Economic benefits of Michigan forest products industry ⁶	
Value added, \$ billion	11
Number of jobs	154,396

¹ Source: MI Department of Labor and Economic Growth, 2005 Covered Industry Employment and Wage (ES-202) Report for NAICS codes 113, 1153, 321, 322, 337, 4232, 4233, 4241. These data do not include sole proprietorships, nor do they include some family-owned businesses that do not employ nonfamily members. Reported wages, therefore, underestimate total income, especially in the timber tract operations and logging categories, which contain many sole proprietors and family businesses.

² US Forest Service. 2004. Michigan state and private forestry fact sheet. USFS Northeastern Area publication.

³ US Forest Service. 1993. Michigan forest statistics, 1993. USDA Forest Service North Central Research Station Resource Bulletin NC-170.

⁴ Data obtained from the US Department of Commerce Bureau of Economic Analysis at www.bea.doc.gov for NAICS codes 113, 114, and 115 (reported as an aggregate), 321, 322, and 337. NAICS codes 4232, 4233, and 4241 were excluded because they could not be reported separately from the entire 42 series in BEA reports.

⁵ Source: 2005 US Census Bureau Annual Survey of Manufacturers, based on 2003 data for NAICS codes 321, 322, and 337. NAICS codes 113, 1153, 4232, 4233, and 4241 are not included.

⁶ Type II economic multipliers were obtained from Potter-Witter, K. 1995. Status and potential of Michigan natural resources. Michigan Agricultural Experiment Station Special Report 71. Economic benefits were calculated by multiplying 2004 jobs by the given multiplier (2.31) for an approximation of the total number of jobs created and by multiplying 2004 contribution to gross state product by the given sales multiplier (2.45) for an approximation of the total value added to Michigan's overall economy by the forest products industry. These values were calculated during the mid 1980s and as a result multipliers may have changed since the base year of the initial study.

Michigan Forest Product Industry Trends 2000-2004

Appendix A – Economic Impact Data for the Michigan Forest Products Industry

Manufacturing Employees in Michigan by Sector

<u>Industry</u>	<u>NAICS Codes</u>	<u>Number of Employees</u>
Transportation equipment	336	255,913
Metals	331, 332	110,769
Machinery	333	75,925
Forest products	113, 1153, 321, 322, 337, 4232, 4233, 4241	66,838
Plastics	326	43,056
Food, beverage, and tobacco	311, 312	37,322
Chemicals	325	27,704
Computers	334	19,165
Printing	323	18,327
Minerals	327	16,512
Electrical equipment	335	14,429
Textiles	313, 314, 315	3,874
Petroleum and coal products	324	1,508
Leather	316	812
Total manufacturing employees		692,154

One of every 10 Michigan manufacturing jobs in 2004 was accounted for by the forest products industry.

Facilities, Employment, and Wages

Number of Facilities/Reporting Units

Year	Logging and	Wood Products	Paper	Furniture	Wholesaling	Total
	Forestry				(4232, 4233, 4241)	
	(113, 1153)	(321)	(322)	(337)	(4232, 4233, 4241)	
2000	492	696	285	765	1,164	3,402
2001	485	677	282	751	1,182	3,377
2002	484	645	281	703	1,257	3,370
2003	445	602	268	651	1,239	3,205
2004	428	569	259	622	1,220	3,098

Number of Employees

Year	Logging and	Wood Products	Paper	Furniture	Wholesaling	Total
	Forestry				(4232, 4233, 4241)	
	(113, 1153)	(321)	(322)	(337)	(4232, 4233, 4241)	
2000	2,122	13,358	20,104	38,358	15,341	89,283
2001	2,050	12,211	17,274	36,855	14,793	83,183
2002	1,958	11,487	16,315	31,087	13,859	74,706
2003	1,897	11,597	15,716	26,697	13,981	69,888
2004	2,023	11,326	14,813	26,167	12,509	66,838

Annual Average Wages Per Sector (\$billion)

Year	Logging and	Wood Products	Paper	Furniture	Wholesaling	Total
	Forestry				(4232, 4233, 4241)	
	(113, 1153)	(321)	(322)	(337)	(4232, 4233, 4241)	
2000	0.05	0.42	0.92	1.62	0.63	3.64
2001	0.05	0.39	0.80	1.52	0.62	3.38
2002	0.05	0.37	0.76	1.29	0.60	3.07
2003	0.05	0.38	0.76	1.16	0.62	2.97
2004	0.06	0.39	0.74	1.16	0.58	2.93