

United States Employment Impact Review of the U.S.-Australia Free Trade Agreement

Pursuant to section 2102(c)(5) of the Trade Act of 2002, the United States Trade Representative, in consultation with the Secretary of Labor, provides the following United States Employment Impact Review of the U.S.-Australia Free Trade Agreement. The report was prepared by the U.S. Department of Labor.

June 8, 2004

Table of Contents

EXECUTIVE SUMMARY.....	5
I. Introduction: Overview of the United States Employment Impact Review Process.....	7
A. Scope and Outline of the United States Employment Impact Review.....	7
B. Legislative Mandate.....	7
C. Public Outreach and Comments.....	8
1. Responses to Federal Register Notice.....	8
2. Reports of the Labor Advisory Committee for Trade Negotiations and Trade Policy (LAC) and Other Advisory Committees.....	10
II. Background and Contents of the FTA.....	12
A. Bilateral Economic Setting.....	12
1. Population and the Economy.....	12
2. Labor Force.....	12
a. U.S. Labor Force.....	12
b. Australia’s Labor Force.....	13
3. International Trade in Goods.....	15
a. Global and Bilateral Trade in Goods.....	15
b. U.S. Merchandise Exports to Australia.....	16
c. U.S. Merchandise Imports from Australia.....	16
4. International Trade in Services.....	16
5. Foreign Direct Investment.....	17
B. Current Barriers to Bilateral Trade.....	17
1. Trade in Goods.....	17
2. Trade in Services.....	18
C. Major Elements of the FTA.....	19
III. Potential Economic and Employment Effects of the FTA.....	23
A. Aggregate Economic Effects.....	23
B. Sectoral Employment Effects.....	26

C.	Potential U.S. Labor Market Effects.....	28
D.	Features in the FTA to Ease the Adjustment Process.....	31
1.	Rules of Origin and Anti-Circumvention Provisions.....	32
2.	Safeguards.....	33
a.	General Bilateral Safeguard.....	33
b.	Bilateral Agricultural Safeguards.....	33
c.	Textile and Apparel Bilateral Emergency Action Safeguard.....	34
3.	Gradual Phase-in of the FTA.....	35
IV.	The Labor Chapter in the FTA, Including the Labor Cooperation Mechanism.....	37
A.	Overview.....	37
B.	Labor and the Trade Act.....	37
C.	Summary of FTA Chapter 18: Labor.....	39
	Appendix.....	42
	Tables and Figures.....	44
	Table II.1: Top 10 NAICS-based U.S. Exports to Australia in 2002.....	45
	Table II.2: Top 10 NAICS-based U.S. Imports from Australia in 2002.....	46
	Table III.1: Total Effect on Real U.S. Exports, Real Imports, Employment, and Real GDP under the U.S.-Australia FTA based on Global Insight's Immediate and Phase-in Tariff Removal Scenarios.....	47
	Table III.2: Sectoral Employment Effects of the U.S.-Australia FTA Under Global Insight's Immediate Tariff Removal Scenario.....	48
	Table III.3: Michigan Model Estimates of the Changes in U.S. Employment Due to Removal of Trade Barriers in Agriculture, Manufacturing, and Services Under the U.S.-Australia FTA.....	49
	Table III.4: Industry-Specific Occupational Employment Share and Hourly Wage, 2002.....	50
	Table III.5: Bilateral Tariff Removal Phase-in Schedule for Non-Agricultural Goods under the U.S.-Australia FTA.....	51
	Table III.6: U.S. Tariff Staging for Imports from Australia under the FTA.....	52
	Table III.7: Australia's Tariff Staging for Imports from the United States under the FTA.....	54

Figure III.1: Change from Baseline U.S. Employment Due to the U.S.-
Australia FTA under Global Insight's Immediate and Phase-in Scenarios...55

Figure III.2: Change from Baseline U.S. Employment in Manufacturing and
Service Producing Industries Under Global Insight's Immediate (in 2004) and
Phase-in Tariff Removal Scenarios.....56

Executive Summary

This employment impact review was prepared pursuant to section 2102(c)(5) of the Trade Act of 2002. Section 2102(c)(5) requires the President to review and report to the Congress on the impact of future trade agreements on U.S. employment, including labor markets. This review describes the contents of the U.S.-Australia Free Trade Agreement (FTA) and assesses the potential economic and employment effects of the FTA. In addition, the review summarizes the content of the labor provisions of the FTA.

The major finding of this review is that the U.S.-Australia FTA is not expected to have any significant effects on employment in the United States. This finding regarding the absence of any significant domestic employment effects from the FTA is attributable to: the substantial amounts (40 percent) of U.S. imports from Australia already entering the United States duty-free; the gradual removal of U.S. tariffs on import-sensitive goods from Australia over an 18-year period; the maintenance of duties on dairy and sugar; and safeguards contained in the FTA to attenuate the effects of any increases in imports that may cause serious injury to a domestic industry. These findings are reinforced by the results of two economic modeling studies commissioned by the U.S. Department of Labor.

The U.S.-Australia FTA is the first U.S. FTA with a developed country since the agreement with Canada in 1988. When the U.S.-Australia FTA enters into force, all but a few U.S. industrial goods will gain immediate duty-free access to Australia's markets and U.S. service providers will gain greater access. As U.S. goods- and service-producing industries become more competitive in the Australian market, it is expected that U.S. merchandise and service exports to Australia will increase. This especially should be the case for the current leading U.S. merchandise exporters and service providers to Australia in areas such as capital and industrial goods, including aircraft, automobiles, machinery and equipment, lumber and wood products, and paper and paper products; and financial and other business related services, including banking, financial services, and insurance. New U.S. export opportunities may also arise in the areas of manufacturing, services, and agriculture as the Australian market—though relatively small—becomes more open. U.S. imports from Australia are also expected to increase as the result of the FTA, especially in products such as meat products, prepared foods, wine, aluminum, metal ores, navigational and scientific instruments, and iron and steel.

I. Introduction: Overview of the Employment Impact Review Process

A. Scope and Outline of the Employment Review

This employment impact review consists of three additional parts. Part II discusses the background and contents of the U.S.-Australia Free Trade Agreement (FTA), including the bilateral economic setting, current barriers to bilateral trade, and the major elements of the FTA. Part III considers the potential economic and employment effects of the FTA, with special emphasis on industrial employment and occupational labor markets in the United States and rules in the FTA to ensure only products that satisfy origin requirements of the Parties benefit from the FTA, mechanisms to attenuate the effects of increases in imports that may cause serious injury to a domestic industry, and longer phase-in of tariff reductions for especially sensitive products. Part IV describes in greater detail the labor provisions of the FTA, including a labor cooperation mechanism.

B. Legislative Mandate

This review of the employment impact of the U.S.-Australia FTA is pursuant to section 2102(c)(5) of the Trade Act of 2002 (“Trade Act”) (Pub. L. No. 107-210). Section 2102(c)(5) provides that the President shall:

review the impact of future trade agreements on United States employment, including labor markets, modeled after Executive Order 13141 to the extent appropriate in establishing procedures and criteria, report to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate on such review, and make that report available to the public.

The President, by Executive Order 13277 (67 Fed. Reg. 70305), assigned the responsibility for conducting reviews under section 2102(c)(5) to the United States Trade Representative (USTR), who delegated such responsibility to the Secretary of Labor with the requirement that reviews be coordinated through the Trade Policy Staff Committee (67 Fed. Reg. 71606).

The employment impact review is modeled, to the extent appropriate, after Executive Order 13141 on the environmental review of trade agreements; the guidelines developed for the implementation of that order have been adapted for use in this employment review.¹

¹ Executive Order 13141, on Environmental Review of Trade Agreements, was signed on November 16, 1999. The Order commits the U.S. government to a policy of careful assessment and consideration of the environmental impacts of trade agreements, including factoring environmental considerations into the development of its trade negotiating objectives. The Order directs that, in certain instances, written environmental impact reviews be made and made available to the public in final form. Also, the Order directs the Office of the U.S. Trade Representative (USTR) and the Council on Environmental Quality (CEQ) to oversee the implementation of the Order, including the development of procedures or guidelines pursuant to the Order. In December 2000, USTR and CEQ published *Guidelines for the Implementation of Executive Order 13141—Environmental Review of Trade Agreements*. The Order and Guidelines are available on the USTR web site at: <http://www.ustr.gov/environmental.shtml>. USTR and CEQ jointly

C. Public Outreach and Comments

1. Responses to Federal Register Notice

The U.S. Department of Labor and USTR jointly issued a notice on May 8, 2003 in the *Federal Register* announcing the initiation of a review of the potential impact on U.S. employment of the proposed U.S.-Australia FTA, including the effects on domestic labor markets, and requesting written public comment on the review and provision of information on potentially significant sectoral or regional employment impacts (both positive and negative) in the United States as well as other likely labor market effects of the FTA.²

Six submissions were received in response to the notice:

- The American Sugar Alliance (ASA)—a national coalition of growers, processors, and refiners of sugar beets, sugarcane, and corn for sweeteners—argued that the reduction or elimination of tariffs on sugar from Australia would result in a major destabilization of the U.S. market, sharply reduced producer prices and income, and great loss of jobs. ASA estimated that a substantial portion of jobs in the U.S. sugar industry (25,000 out of slightly over 61,300) would be lost if tariffs were eliminated on imports of sugar from Australia. The ASA further observed that many of these direct job losses would occur in areas such as the Northern Great Plains, the Hawaiian outer islands, and southern Louisiana where alternative employment opportunities, within and outside agriculture, are very limited. The ASA also opined that U.S. efforts to reform the grossly distorted world sugar market should be done within the multilateral context of the WTO and not piecemeal through the framework of FTAs. [Under the FTA, Australia will gain no increase in access for sugar. The U.S. MFN/NTR base tariff rate on sugar from Australia will not change. In addition, Australia will not receive any new or additional access under the U.S. tariff rate quota; see section III.D.3 of this review.]
- The American Dehydrated Onion and Garlic Association (ADOGA) argued that the costs and benefits of the FTA weigh toward the negative for the domestic dehydrated onion and garlic industry and that duty-free treatment of dehydrated onion and garlic from Australia could potentially open the U.S. market to lower-cost Australian products as well as the potential for transshipments of lower-than-fair-value products from China that would damage the employment opportunities of the more than 4,000 workers within the U.S. dehydrated onion and garlic industry. ADOGA called for the maintenance of existing U.S. tariff protection for dehydrated onion and garlic and the exemption of these products from tariff elimination under the FTA. [Under the FTA, U.S. tariffs on imports of

oversee implementation of the Order and Guidelines, while USTR, through its Trade Policy Staff Committee (TPSC), is responsible for conducting individual reviews.

² See 68 Fed. Reg. 24785-24786 (May 8, 2003).

dehydrated onion and garlic from Australia will be phased out over an 18-year period and originating product will be subject to a price-based safeguard during the 18-year transition period; see section III.D.3 of this review.]

- The National Milk Producers Federation (NMPF)—representing U.S. dairy farmers and dairy cooperative marketing associations—and the U.S. Dairy Export Council (USDEC)—representing the export trade interests of U.S. milk producers, dairy cooperatives, proprietary processors, export traders, and their allied industry suppliers—argued that eliminating U.S. dairy import tariff-rate quotas on imports from Australia under the FTA, without eliminating all global trade distortions in dairy product trade, would have a significant and negative impact on employment in the U.S. dairy industry. NMPF and USDEC estimate that if this were to occur, about 13 percent of total U.S. milk production and dairy product processing and manufacturing would be displaced by increased imports from Australia and result in the loss of over 152,000 U.S. jobs (58,000 direct jobs in dairy farms and dairy processing and 94,000 indirect jobs related to farm and processor employee spending and farm and processor input suppliers). [U.S. import duties on amounts from Australia in excess of the quotas for certain dairy products will remain at base rates under the FTA; and the United States will provide some additional access under a preferential FTA tariff rate quota for certain Australian dairy products; see section III.D.3 of this review.]
- Meat & Livestock Australia (MLA)—an organization of Australian producers in the cattle, sheep, and goat industries that also provides services to meat processors and live animal exporters—argued that removing existing trade barriers to U.S.-Australian trade in beef, especially manufactured beef (mainly used in making hamburger patties and hot dogs), would have a positive effect on the U.S. economy, including the employment picture in U.S. industries that handle, process, and distribute imported beef. MLA observed that imported lean grass fed beef from Australia fills a niche in the U.S. market and complements grain fed trimmable fat U.S. beef in blending manufactured beef products for the U.S. fast food industry. MLA’s analysis indicates that an increase of 100 million pounds of imported Australian manufactured beef could result in “direct economic value creation” in the United States of between \$50 million and \$175 million and indirect economic benefits of between \$50 million and \$875 million that would inevitably lead to increased employment in the affected U.S. sectors. [U.S. import duties on beef from Australia will be phased out and additional access through a preferential tariff rate quota will increase over an 18-year period; safeguards will be in place during the 18-year transition period and beyond; see section III.D.3 of this review.]
- The Tile Council of America, Inc. (TCA), the trade association of the American ceramic tile industry, expressed concerns about the cumulative injurious effect of the multiple FTAs that have been and are currently being negotiated on the U.S. ceramic tile industry’s manufacturing operations. In their view, the cumulative effect of new U.S. market access commitments and proposals (such as the U.S.-

Australia FTA) is to open the U.S. market to a flood of low-priced imports, often at dumped and subsidized prices underwritten by the virtual absence of environmental and labor standards commensurate with those of the United States, that will result in a ruinous effect on American producers, especially in import-sensitive industries such as the U.S. ceramic tile industry. The U.S. ceramic tile industry has faced increasing import penetration (now 80 percent or more) that has resulted in numerous plant closings, or other operating plants running well below capacity, and employment contractions. TCA expressed the view that if additional market access commitments are made in the U.S.-Australia FTA for ceramic tile, this will simply exacerbate the conditions that are causing the disappearance of the U.S. ceramic tile industry. TCA opined that the United States must safeguard the interests and continued viability of small- and medium-sized domestic manufacturing businesses producing import-sensitive and already highly import-impacted products, such as ceramic tile, in the United States by excluding them from any further tariff reductions or concessions. [Under the FTA, U.S. tariffs on imports of ceramic tiles from Australia will be phased out over an 8-year period; see section III.D.3 of this review.]

- Comstock & Theakston, Inc., a U.S.-based private licensed customhouse brokerage, argued that eventual elimination of duty drawback³ in the U.S.-Australia FTA could result in placing U.S. businesses in a disadvantageous position in terms of export trade and restricting duty drawback would almost certainly result in the loss of jobs, especially those related to export trade. Comstock & Theakston, Inc. estimated approximately 3,442 high quality U.S. jobs benefited from duty drawback related to U.S. exports to Australia in 2000. [Under the FTA, current duty drawback provisions are not modified; see section II.C of this review.]

2. *Reports of the Labor Advisory Committee for Trade Negotiations and Trade Policy (LAC) and Other Advisory Committees*

Section 2104(e) of the Trade Act requires that advisory committees provide the President, USTR, and Congress with reports under Section 135(e)(1) of the Trade Act of 1974, as amended, not later than 30 days after the President notifies Congress of his intent to enter into an agreement. The advisory committee reports on the U.S.-Australia FTA were all submitted on March 12, 2004 and are available on the USTR web site.⁴

The Advisory Committee on Trade Policy and Negotiations (ACTPN) and the other 29 trade advisory committees virtually all expressed the view that the U.S.-Australia FTA is in the economic interest of the United States and stated their support for the FTA. The findings of a majority of the ACTPN were that the FTA “is strongly in the economic interest of the United States” and that the agreement is “outstanding” and should “be adopted quickly.” ACTPN described the agreement’s rapid elimination of Australian

³ Duty drawback programs permit a manufacturer to recoup the duties paid on imported materials that are unused and then exported, or are used to produce a finished product which is then exported.

⁴ See <http://www.ustr.gov/new/fta/Australia/advisor/index.htm>.

tariffs on U.S. manufactured exports as “an unprecedented negotiating accomplishment.” ACTPN also noted that the FTA will not be disruptive to the U.S. economy since “sufficient transition and adjustment times have been built into the agreement for sensitive products.” A labor representative on the ACTPN dissented from the views of other ACTPN members.

The Industry Sector Advisory Committees (ISACs) on Aerospace Equipment (ISAC-1); Lumber and Wood Products (ISAC-10); Paper and Paper Products (ISAC-12); Services (ISAC-13); and Transportation, Construction, and Agricultural Equipment (ISAC-16), in particular, commented that the FTA would benefit the exports of their respective industries. ISAC-13 (Services) noted that the lack of temporary entry provisions in the FTA is a disappointment. The ACTPN and a number of ISACs also indicated that the investment provisions of the FTA would improve the opportunities and conditions for U.S. investments in Australia; however, some expressed concerns about the lack of investor-state dispute resolution provisions. Some ISACs welcomed the retention of duty-drawback privileges under the FTA; several expressed concerns about the exclusion of sugar from the FTA; and others expressed concerns about outstanding sanitary and phytosanitary issues for market access of U.S. agricultural goods.

The report of the Labor Advisory Committee for Trade Negotiations and Trade Policy (LAC) argued that the FTA would lead to a deteriorating U.S. trade balance and the loss of U.S. jobs, citing their views of the impact of NAFTA. The LAC was also critical of the underfunding of the Trade Adjustment Assistance Program for workers displaced by imports and the low number of worker certifications under the program. While noting “the impacts of the Australia agreement on the U.S. economy are difficult to predict,” the LAC expressed “concerns about the impact of the agreement on American entertainment industry workers, whose jobs are already at risk due to the production of American films and television shows overseas,” and about how several sensitive sectors (meat, dairy, and macadamia nuts) might fare under the agreement. Reiterating the concerns they raised regarding the other recently negotiated free trade agreements with Chile and Singapore, the LAC expressed concerns about the FTA’s labor provisions that commit the Parties to enforce their own labor laws. The LAC argued that the FTA’s dispute resolution procedure provides for lower penalties that are capped with little punitive or deterrent effect for violations of the Labor Chapter than for other violations. The LAC also opined that the FTA’s rules of origin and safeguard provisions would invite circumvention by producers and fail to protect workers from import surges that may result and that the FTA provisions on investment, procurement, and services would constrain the ability of the U.S. government to regulate in the public interest and provide public services.

II. Background and Contents of the FTA

The U.S.-Australia FTA is the first U.S. FTA with a developed country since the U.S.-Canada FTA in 1988. When the U.S.-Australia FTA enters into force, nearly all industrial goods originating from each Party will gain immediate duty-free access to the other Party's market and the Parties' service providers will also gain greater access to each others' markets. Market access for each Party's textile and apparel goods will be opened in parallel over a 12-year period. U.S. agricultural products will gain duty-free access to the Australian market upon entry into force of the FTA, while Australian agricultural products will gain increased access to U.S. markets over a period of up to 18 years (with the exception of sugar).

A. Bilateral Economic Setting

1. *Population and the Economy*

Australia's population in 2002 was 19.6 million (or 6.8 percent of the U.S. population of 288.4 million). With a land area slightly smaller than the U.S. contiguous 48 states, Australia's gross domestic product (GDP) was \$410.6 billion in 2002, approximately 3.9 percent of the U.S. GDP of \$10.4 trillion. Australia's economy is comparable in size to that of Pennsylvania, which had a gross state product of \$408.4 billion in 2001. Australia's gross national income (GNI) per capita in 2002 was \$19,740, approximately 56.3 percent of U.S. per capita GNI of \$35,060.

2. *Labor Force*

a. U.S. Labor Force

In 2003, the civilian U.S. labor force totaled 147 million workers (slightly above the level of 145 million in 2002); nearly 47 percent (68 million) was female.⁵ The service-producing industries are the major source of employment in the United States. In 2003, service-producing industries accounted for 78 percent of total U.S. employment of 138 million; within this group, services, including professional and business, education and health, public administration, and other services, accounted for 49 percent of total U.S. employment and wholesale and retail trade accounted for 15 percent. Other major sectors of employment include manufacturing, which accounted for 12 percent of total U.S. employment, mining and construction, which accounted for about 8 percent, and agriculture, which accounted for about 2 percent. On an occupational basis, approximately 35 percent of all the employed persons were in either managerial professions (15 percent of total employment) or professional and related occupations (20 percent of total employment); other major occupational categories of U.S. employment were sales and office occupations (26 percent of total employment) and service occupations (16 percent of total employment). On the industrial basis used for cross-

⁵ The labor force consists of employed or unemployed persons in the civilian non-institutional population age 16 and older. See *Employment and Earnings* 51:1(January 2004).

country analysis,⁶ U.S. employment in 2002 was distributed across industrial sectors as follows: 2.5 percent in the agricultural sector, 20.8 percent in industry, and 76.7 percent in the service sector.

The average unemployment rate in the United States was 6.0 percent for 2003, a slight increase from 5.8 percent in 2002. The majority of the U.S. unemployed in 2003 were those who lost jobs and those who had completed temporary jobs (55 percent). Reentrants into the labor force made up 28 percent of the unemployed in 2003, new entrants represented 7 percent, and job leavers accounted for 9 percent. From an industry standpoint, the unemployment rate rose moderately during 2003 in mining, construction, transportation, utilities, and services; it edged down in manufacturing, wholesale and retail trade, and information services.⁷

Educational attainment has had a favorable influence on finding and keeping a job in the United States. In 2003, 10 percent of the employed workers 25 years or older had less than a secondary degree, 30 percent had finished secondary schooling but had no college, 27 percent had some tertiary schooling, and 33 percent had a college degree. Of those unemployed in 2003, 18 percent had not completed secondary school, 34 percent had completed secondary schooling with no college, 27 percent had attended some college (including those receiving an associate degree), and 20 percent had a college degree.⁸

In 2003, business sector labor productivity rose 4.5 percent, a small decrease from 4.9 percent annual average labor productivity growth in 2002. Overall, labor productivity in manufacturing increased 5.1 percent in 2003, compared to labor productivity increases for durable goods and nondurable goods within the manufacturing sector of 7.7 percent and 1.9 percent, respectively.⁹

On average, U.S. workers worked 39 hours per week during 2003; the average full-time worker put in 42.9 hours per week. Persons working in agriculture reported 43.5 hours of work per week on average.

b. Australia's Labor Force

In 2002 (the most recent year for which complete data are available), Australia's civilian labor force consisted of approximately 10.0 million workers, of which 9.3 million were employed.¹⁰ Female workers made up about 44 percent (4.1 million) of those employed

⁶ *Agriculture* includes agriculture, forestry, hunting and fishing; *Industry* includes manufacturing, mining, and construction; and *Services* includes transportation, public utilities, trade, finance, public administration, private household services, and miscellaneous services. See *Comparative civilian labor force statistics, ten countries: 1959 - 2002*, U.S. Bureau of Labor Statistics, February 11, 2004; available at: <http://stats.bls.gov/fls/home.htm>.

⁷ See *Employment and Earnings* 51:1(January 2004).

⁸ See *Employment and Earnings* 51:1(January 2004).

⁹ *Productivity and Costs, First Quarter 2004*, preliminary, U.S. Bureau of Labor Statistics, May 2004.

¹⁰ Data for 2003 were not available when this review was prepared. The civilian labor force refers to employed and unemployed persons 15 years old or older. *Labour Statistics in Brief*, 6104.0, Australia Bureau of Statistics, Canberra, 2003; available from <http://www.abs.gov.au>.

in 2002.¹¹ The major sectors of employment in Australia in fiscal year 2002 were: retail sales (15 percent); manufacturing (12 percent); and property and business services (11 percent).¹² The top occupational employment groups in fiscal year 2002 were: professional (18.5 percent); intermediate clerical, sales, and services (17.1 percent); and tradespersons and related (12.8 percent).¹³ On the industrial basis used for cross-country analysis,¹⁴ employment in Australia in 2002 was distributed across economic sectors as follows: 75.1 percent in services, 20.6 percent in industry, and 4.3 percent in agriculture.

Australia's unemployment rates are comparable with those of the United States.¹⁵ The average rate of unemployment in Australia was 6.3 percent in 2002.¹⁶ Approximately 16.7 percent of the unemployed in Australia in 2002 were workers seeking their first jobs.¹⁷ Approximately 11 percent of the unemployed had previously been employed in service positions, including personal services and sales; 8.1 percent were former clerks; and 8.0 percent were former craft and related trade workers.¹⁸ The industries in which substantial numbers of the unemployed formerly worked in 2002 included: wholesale and retail trade, repair of motor vehicles, and personal and household goods (13.3 percent); real estate, renting, and business activities (7.3 percent); hotels and restaurants (5.3 percent); and manufacturing (5.1 percent).¹⁹

In May 2002, 33.5 percent of the civilian labor force had completed lower secondary and 35.5 percent had completed upper secondary schooling, 9.6 percent had participated in a post-secondary program professional or technical program, 14.9 percent had participated in tertiary schooling, and 5.6 had post-graduate schooling.²⁰ Of those who were unemployed, 16.6 percent had had some tertiary education, including post-secondary

¹¹ *Labour Statistics in Brief*, Australia Bureau of Statistics.

¹² Annual Australian statistical data are reported on a fiscal year basis that covers the period from the beginning of July to the end of next June. For example, fiscal year 2002, reported as 2001 – 2002, refers to the period of time that began on July 1, 2001 and ended on June 30, 2002. Industry categories are classified using the Australian and New Zealand Standard Industrial Classification (ANZSIC). *Year Book Australia 2003, Labour*, Australia Bureau of Statistics, Canberra, January 2003; available from <http://www.abs.gov.au>.

¹³ Occupation categories are classified using the Australian Classification of Occupation. Ibid.

¹⁴ *Agriculture* includes agriculture, forestry, hunting and fishing. *Industry* includes manufacturing, mining, and construction; *Services* includes transportation, communication, public utilities, trade, finance, public administration, private household services, and miscellaneous services. See *Comparative civilian labor force statistics, ten countries: 1959 - 2002*, U.S. Bureau of Labor Statistics, February 11, 2004; available at: <http://stats.bls.gov/fls/home.htm>.

¹⁵ Ibid., p. 4.

¹⁶ *Labour Statistics in Brief*, Australia Bureau of Statistics.

¹⁷ This result is based on the annual average of Australian monthly household survey data.

¹⁸ Percentages given are of total unemployment. Positions not classifiable by occupation made up the largest group (25.3 percent) of the unemployed in 2002. Occupations definitions are taken from the International Standard Classification of Occupations (ISCO-88). See International Labor Organization, *ILO LABORSTA*.

¹⁹ Percentages given are of total unemployment. Industry categories are taken from the International Standard Industrial Classification of all Economic Activities, Revision 3 (ISIC – Rev 3). Ibid. Most (25.0 percent) of the unemployed were in sectors not classifiable by economic activity.

²⁰ The figures refer to the highest level of education attained. International Labor Organization, *LABORSTA*, [online database] [cited October 2003]; available from <http://laborsta.ilo.org>.

vocational training, college, or graduate school; 31.5 percent had upper secondary schooling; and 57 percent had only lower secondary schooling.²¹

During fiscal year 2003, Australia experienced overall labor productivity growth of nearly 1 percent.²² Sectors that experienced significant labor productivity growth were: construction (11.4 percent); accommodation, cafes and restaurants (5.9 percent); and transport and storage (5.5 percent). Australia experienced a 13.3 percent decline in labor productivity in agriculture, forestry and fishing and a nearly 10 percent decline in the mining. Labor productivity in manufacturing decreased by less than one percent.

3. *International Trade in Goods*

a. Global and Bilateral Trade in Goods

U.S. trade in goods represented 17 percent of its GDP in 2002. U.S. goods trade with the world amounted to \$1.8 trillion (\$629.6 billion exports and \$1,154.8 billion imports) in 2002. Based on available statistics from the World Trade Organization (WTO), the United States was the world's number one merchandise exporter and number one merchandise importer in 2002.²³

Australia's trade in goods represented 33.5 percent of its GDP in 2002. During 2002, Australia's goods trade with the world amounted to \$136.0 billion (\$65.0 billion exports and \$72.7 billion imports). Based on available statistics from the WTO, Australia was the world's 25th largest merchandise exporter and the world's 20th largest merchandise importer in 2002.²⁴ More than one half of Australia's exports are of basic commodities such as food, fuel and ores.²⁵

U.S. bilateral goods trade with Australia represents a very small share of U.S. trade with the world. In 2002, U.S. trade with Australia accounted for 2.0 percent (\$12.3 billion) of overall U.S. exports to the world and 0.6 percent (\$6.4 billion) of overall U.S. imports from the world. Australia ranked as the 12th largest U.S. export market and the 28th largest source for U.S. goods imports in 2002. In contrast, the United States was Australia's second largest export partner (Japan was first) and largest import supplier in 2001 (the most recent year for which data are available), accounting for 10 percent of Australia's exports and 18 percent of Australia's imports. Between 1998 and 2002, U.S.

²¹ Education categories are from the new Australian Standard Classification of Education (ASCED). International Labor Organization, *Ibid*.

²² Australian Bureau of Statistics, National Accounts 2002-2003 (ABS website: <http://www.abs.gov.au>).

²³ Trade rankings, which are based on a general trade definition, are compiled by the World Trade Organization (WTO); see *International Trade Statistics 2003*, Table I.5 (Geneva: World Trade Organization, 2003), p. 21.

²⁴ Trade rankings, which are based on a general trade definition, are compiled by the World Trade Organization (WTO); see *International Trade Statistics 2003*, Table I.5 (Geneva: World Trade Organization, 2003), p. 21.

²⁵ World Trade Organization, *Trade Policy Review: Australia*, (Geneva: World Trade Organization, 2002), chapter 1.

exports to Australia increased by 6.4 percent while U.S. imports from Australia increased by 21.2 percent.

b. U.S. Merchandise Exports to Australia

U.S. goods exports to Australia amounted to \$12.3 billion in 2002. Over half (56 percent) were accounted for by the top 10 5-digit export-based North American Industry Classification System (NAICS) industries, covering a variety of manufactured products, including: aerospace products; special classification provisions;²⁶ computer equipment; navigational and medical instruments; pharmaceuticals and medicines; construction machinery; medical equipment and supplies; agricultural implements; engines and turbines; autos and light duty motor vehicles (See Table II.1).

c. U.S. Merchandise Imports from Australia

U.S. goods imports from Australia amounted to \$6.4 billion in 2002. Over half (60 percent) were accounted for by the top 10 5-digit import-based NAICS industries, covering a variety of food and agricultural products such as meat products and wine; several natural resource based products such as oil and gas, alumina, and other metal ores; and several manufactured products such as autos, iron and steel, women's apparel, and navigational and medical instruments (See Table II.2).

4. *International Trade in Services*

The United States was the world's number one commercial services exporter (\$272.6 billion) and number one commercial services importer (\$205.6 billion) in 2002, based on data from the WTO.²⁷ By comparison, Australia was the world's 25th largest exporter (\$16.7 billion) and 22nd largest importer of commercial services in 2002.²⁸

Based on data from the U.S. Department of Commerce, U.S. services exports through cross-border trade with Australia were \$5.2 billion out of a total of \$279.5 billion in 2002 (about 0.2 percent of total U.S. services exports), and U.S. services imports from Australia were \$2.9 billion out of the total U.S. imports of \$205.2 billion (about 0.1 percent of total U.S. services imports).²⁹

²⁶ Primarily exports of low-value shipments, articles imported for repairs, returned goods, and articles donated to charity.

²⁷ Trade rankings, which are based on a balance of payments definition, are compiled by the World Trade Organization (WTO); see *International Trade Statistics 2003*, Table I.7 (Geneva: World Trade Organization, 2003), p. 23.

²⁸ Trade rankings, which are based on a balance of payments definition, are compiled by the World Trade Organization (WTO); see *International Trade Statistics 2003*, Table I.7 (Geneva: World Trade Organization, 2003), p. 23.

²⁹ See Maria Borga and Michael Mann, "U.S. International Services: Cross-Border Trade in 2002 and Sales Through Affiliates in 2001, *Survey of Current Business* (October 2003), pp.58-118.

U.S. services exports to Australia in 2002 consisted of: \$2,264 million in other private services³⁰ (or about 42 percent of all U.S. services exports to Australia); \$1,473 million in travel (or about 27 percent); \$834 million in royalties and license fees (about 15 percent); \$339 million in passenger fares (about 6 percent); and \$292 million in other transportation (about 5 percent). U.S. services imports from Australia in 2002 consisted of: \$1,030 million in other private services (about 33 percent of total U.S. services imports from Australia); \$997 million in travel (about 32 percent); \$641 million in passenger fares (about 21 percent); \$192 million in other transportation (or about 6 percent); and \$76 million in royalties and license fees (about 2 percent).

Sales of services in Australia by majority U.S.-owned affiliates were \$14.7 billion in 2001, while sales of services in the United States by majority Australian-owned firms were \$10.7 billion.

5. *Foreign Direct Investment (FDI)*

The stock of U.S. FDI in Australia was \$36.3 billion in 2002, up from \$32.6 billion in 2001.³¹ U.S. FDI in Australia is concentrated in the petroleum, finance, and manufacturing sectors.³² The stock of Australia's FDI in the United States was \$24.5 billion in 2002, up from \$22.3 billion in 2001.³³ During fiscal year 2001, the value of Australia's outward foreign direct investment (FDI) exceeded the value of its inward FDI for the first time; Australia's outward FDI is concentrated in North America.³⁴

B. Current Barriers to Bilateral Trade

1. Trade in Goods

Australia's average applied most-favored-nation/normal trade relations (MFN/NTR) tariff was 4.3 percent in 2002;³⁵ the average was 4.7 percent for industrial products and 1.2 percent for agricultural products. Over 48 percent of the tariff lines are MFN/NTR duty free and 38 percent have duty rates between zero and five percent. Over 11 percent of the tariff lines have duty rates above 10 percent and include items such as passenger motor vehicles, textiles, clothing, and footwear. The highest applied tariff rates are 25 percent for apparel and certain finished textiles and 15 percent for cotton sheeting,

³⁰ "Other private services" includes services such as education, financial services, insurance, and business, professional, and technical services.

³¹ See Maria Borga, "Direct Investment Positions for 2002: Country and Industry Detail," *Survey of Current Business*, U.S. Commerce Department, July 2003, pp. 22-31.

³² United States Trade Representative, *Foreign Trade Barriers 2003*, p.8.

³³ See Maria Borga, "Direct Investment Positions for 2002: Country and Industry Detail," *Survey of Current Business*, U.S. Commerce Department, July 2003, pp. 22-31.

³⁴ World Trade Organization, *Trade Policy Review: Australia* (Geneva: World Trade Organization, 2002), chapter 1.

³⁵ Tariff treatment now known in the United States as "normal trade relations" (NTR) treatment was formerly known as "most-favored-nation" (MFN) treatment and other countries continue to use the term MFN.

fabrics, carpet, footwear parts, and passenger motor vehicles. Over 96 percent of the tariff lines are bound, mostly within the zero to 55 percent range, with an average bound rate of 10.5 percent; however, in contrast to most OECD countries, Australia's applied rates are considerably lower than their bound rates.³⁶ There are tariff-rate quotas for five cheese items and non-manufactured tobacco.

In 2002, of the \$6.4 billion of U.S. imports from Australia, \$2.7 billion (42 percent) entered MFN/NTR duty free. Of the remaining \$3.7 billion that was potentially subject to duty, \$19 million entered duty free under the Harmonized Tariff System (HTS) 9802 program, \$17 million entered duty free under other special (Chapter 99) provisions,³⁷ and \$3.6 billion were assessed duties at an average *ad valorem* rate of 3.4 percent. Approximately \$800 million (or about one-quarter) of the imports that were assessed duties were subject to an *ad valorem* duty rate of less than or equal to 1 percent, \$707 million were assessed duties between 1 and 2 percent, \$1,682 million between 2 and 5 percent, \$155 million between 5 and 10 percent, \$238 million between 10 and 20 percent, \$13 million between 20 and 30 percent, and \$37 million above 30 percent.

On a sectoral basis, the largest amount of U.S. imports from Australia in 2002 that were subject to an *ad valorem* tariff of greater than 10 percent were apparel and accessories. Other sectors with sizable amounts of imports subject to an *ad valorem* tariff of over 2 percent included food and kindred products, beverages and tobacco products, chemicals, and transportation equipment.

2. Trade in Services

Australia has a relatively open services regime, but with significant restrictions in certain sectors. Telstra Telecom, the majority government-owned telecommunications company, has engaged in practices that have impeded U.S. company access to Australia's telecommunications market. Barriers in audiovisual services include broadcast content restrictions on television programming, advertising, and music. All potential foreign investors are required to submit to a screening process through the Foreign Investment Review Board, which can disapprove investment applications that it does not consider in the national interest.

The U.S. services and investment regimes also are generally open,³⁸ with some exceptions. In the maritime sector, cabotage laws reserve domestic routes to U.S. operators and government support for U.S.-flag vessels. The United States restricts

³⁶ World Trade Organization, *Trade Policy Review: Australia*, (Geneva: World Trade Organization, 2002), chapter 3.

³⁷ Chapter 98 of the Harmonized Tariff Schedules (HTS) of the United States contains provisions related to foreign processing of U.S. materials; duties are assessed only on the foreign value added and not on the U.S. content value. Chapter 99 of the HTS contains special or temporary duty exemptions.

³⁸ See *WTO Trade Policy Review: United States, September 2001* at http://www.wto.org/english/tratop_e/tpr_e/tp172_e.htm, and *Statement on Foreign Direct Investment Policy* (U.S. Department of Treasury, December 26, 1991).

foreign ownership and control of U.S. air transport carriers, and the provision of domestic air service is restricted to U.S. carriers. The United States also restricts foreign investment in telecommunications, radio broadcast, atomic energy, and energy pipelines. Insurance is subject to regulation at the state level, as is professional services. Finally, under the Exon-Florio Amendment to the Defense Production Act, the President has the authority to suspend or prohibit foreign mergers, acquisitions, and takeovers, where there is credible information of a threat to national security.

C. Major Elements of the FTA

The FTA consists of a Preamble, 23 chapters (Establishment of a Free Trade Area and Definitions; National Treatment and Market Access for Goods; Agriculture; Textiles; Rules of Origin; Customs Administration; Sanitary and Phytosanitary Measures; Technical Barriers to Trade; Safeguards; Cross-Border Trade in Services; Investment; Telecommunications; Financial Services; Competition Policy; Government Procurement; Electronic Commerce; Intellectual Property; Labor; Environment; Transparency; Institutional Arrangements and Dispute Settlement; General Provisions and Exceptions; and Final Provisions), six annexes on non-conforming measures in services and investment, and banking and other financial services for each Party; and side letters (exchange of letters, letters from Australia, and letters from the United States). The complete text of the FTA and summary fact sheets are available on USTR's website.³⁹

Following is a summary of the FTA provisions that are most relevant to this employment impact review. The Labor Chapter (Chapter 18) is discussed separately and in more detail in part IV of this review.

- *Preamble*

Although it does not create specific obligations, the Preamble to the FTA frames the FTA's obligations and sets out the broad aims and objectives of the agreement. The Preamble sets out that the Parties resolve that the FTA will bring economic and social benefits, create new employment opportunities, and improve living standards in the two countries. It also resolves that the Parties will implement the agreement in a manner consistent with their commitment to high labor standards.

- *National Treatment and Market Access for Goods (Chapter 2)*

The FTA market access provisions set out the schedules for the elimination of tariffs on goods originating in the two countries. The agreement does not include any provisions modifying the use of duty drawback. (For more details, see section III.D.3 of this review.) Also included in this chapter is an annex on pharmaceuticals outlining common principles on facilitating high quality health care. In implementing these principles, Australia will make a number of improvements in its Pharmaceuticals Benefits Scheme (PBS) procedures—including establishment of an independent process to review

³⁹ See <http://www.ustr.gov>.

determinations of product listings—that will enhance transparency and accountability of PBS.

- *Textiles (Chapter 4)*

Textiles and apparel tariffs will be phased out bilaterally by 2015 for goods that meet the agreement’s “yarn-forward” rule of origin. To benefit from duty-free entry, an apparel item be made from yarn or fabric manufactured in Australia or the United States. This chapter establishes emergency action and rule of origin provisions to assure that only textile and apparel products that originate in Australia or the United States benefit from tariff preferences for textiles and apparel products. (For more details, see section III.D.2.c of this review.) The chapter also includes special customs cooperation procedures to ensure accuracy in claims of origin, to prevent circumvention and to address other enforcement matters. The duty drawback program remains available for textile and apparel products and will have no phase-out period.

- *Rules of Origin (Chapter 5) and Customs Administration (Chapter 6)*

The FTA provides strong but simple rules of origin to ensure that only eligible products from the FTA Parties receive preferential treatment. The FTA requires transparency and efficiency in customs administration, with commitments on publishing laws and regulations on the Internet, and ensuring procedural certainty and fairness. Both Parties agree to share information to combat illegal transshipment of goods. (For more details, see section III.D.1 of this review.)

- *Technical Barriers to Trade (Chapter 8)*

The FTA includes an enhanced cooperation program to exchange information on subjects covered by the WTO Agreement on Technical Barriers to Trade (WTO TBT Agreement), which addresses technical regulations, standards, and conformity assessment procedures.

- *Trade Remedies: Safeguards (Chapter 9)*

The Safeguards Chapter allows a Party to restore the MFN/NTR duty if a product is being imported in such increased quantities so as to be a substantial cause of serious injury, or threat thereof, to a domestic producer of a like or directly competitive product. (See section III.D.2.a of this review for more details.)

- *Cross-Border Trade in Services (Chapter 10)*

The FTA’s core commitments regarding services are modeled on obligations and concepts in the WTO General Agreement on Trade in Services (GATS), the North American Free Trade Agreement (NAFTA), and other FTAs to which the United States is a party. These include provisions for national treatment and most-favored-nation treatment for services suppliers in like circumstances and obligations concerning transparency in regulatory processes. Services supplied in the exercise of governmental

authority (i.e., any service that is supplied neither on a commercial basis nor in competition with one or more services suppliers) are excluded from coverage. The FTA disciplines will apply across a broad range of services sectors with very few exceptions. The FTA's disciplines apply both to cross-border supply of services (such as those delivered electronically, or through the travel of services professionals across borders) and the right to establish a local services presence.

- *Investment (Chapter 11)*

The FTA's Investment Chapter contains a comprehensive set of well-established standards found in investment agreements throughout the world, including in the U.S.-Singapore and U.S.-Chile FTAs. The chapter includes provisions obligating each Party to treat investors of the other Party and their investments no less favorably than its own investors and their investments in like circumstances (national treatment) and no less favorably than the investors of other countries and their investments in like circumstances (most-favored-nation treatment). Likewise, the chapter contains disciplines on imposing listed "performance requirements" on investors of the other Party as a condition of the investment (with appropriate exceptions for non-discriminatory health, safety, and environmental requirements). In recognition of the unique circumstances of this FTA, including shared legal traditions of the United States and Australia and the confidence of their investors in operating in each other's markets, the Investment Chapter does not include provisions for the resolution of disputes between private investors and a Party (so-called investor-state provisions). It does, however, allow for the issue to be revisited should the circumstances change.

- *Government Procurement (Chapter 15)*

The chapter on government procurement represents a significant accomplishment since Australia is one of the few developed countries that is not a member of the WTO Agreement on Government Procurement. U.S. suppliers will be able to bid on contracts to supply Australian government ministries, agencies, and departments following tendering procedures that are conducted in a transparent, predictable, and fair manner. Australian central government entities will eliminate their industry development programs, under which suppliers have had to provide various types of offsets (e.g., local content or local manufacturing requirements as a condition of their contracts).

- *Labor (Chapter 18)*

See section IV of this review.

- *Environment (Chapter 19)*

The FTA's Environment Chapter incorporates Trade Act guidance through a number of core obligations concerning effective enforcement of environmental laws, providing for high levels of environmental protection and not weakening environmental laws to

encourage trade or attract investment.⁴⁰ The FTA also includes articles on environmental cooperation, procedural guarantees (e.g., commitments by each Party to provide remedies for violations of its environmental laws and to provide appropriate public access to environmental enforcement proceedings), and consultative procedures for implementing the provisions of the chapter. Consistent with Trade Act guidance, the effective enforcement provision is enforceable through the FTA's State-to-State dispute settlement provisions. A separate Joint Statement on Environmental Cooperation was negotiated in order to further support ongoing activities and guide future bilateral work.

- *Transparency (Chapter 20)*

The FTA's Transparency Chapter requires both Parties to publicize their laws, regulations, procedures, and administrative rulings of general applicability respecting matters covered by the agreement to permit interested persons to become acquainted with them. Also, to the extent possible, such proposed measures shall be published in advance to provide interested persons a reasonable opportunity to comment on them.

- *Institutional Arrangements and Dispute Settlement (Chapter 21)*

The FTA sets out detailed provisions providing for speedy and impartial resolution of government-to-government disputes over the implementation of the agreement. Consistent with Trade Act guidance, the FTA's core obligation to effectively enforce labor laws (as well as the analogous obligation in the FTA's environmental provisions) is subject to the dispute settlement provisions. The dispute settlement procedures contain specific provisions for resolving labor disputes, which include opportunities for labor officials to consult on labor issues before they proceed to dispute settlement, and for labor experts to serve as panelists and/or advisors to panel members. An innovative enforcement mechanism includes monetary penalties as a way to enforce commercial, labor, and environmental obligations of the FTA. Special provisions give guidance on factors panels should take into account in considering the amount of monetary assessments in environmental and labor disputes, and provide for assessments to be paid into a fund to be expended for appropriate environmental and labor initiatives. The Party making the dispute may withdraw trade benefits to collect the assessment, if the other Party fails to pay the assessment. The dispute settlement provisions also set high standards for openness and transparency, including provisions for open public hearings, public release of legal submissions, and rights for interested third parties to submit views.

⁴⁰ A separate environmental review provides a more detailed description of this chapter and related topics.

III. Potential Economic and Employment Effects of the FTA

This review focuses on the potential employment and labor market impacts of the U.S.-Australia FTA on the United States. It is based on both qualitative and quantitative assessments of the likely economic effects of removing barriers to trade between the Parties given the current structure and volume of U.S.-Australian trade. The U.S. Department of Labor also commissioned two studies that used different methodologies (see Appendix) and assumptions regarding the possible outcomes of the negotiations to quantify and assess the impact of the FTA on the U.S. economy and industrial employment in the United States. These assumptions do not reflect the actual outcome of the negotiations, but attempt to predict the greatest potential impacts that an FTA could have given the current structure and volume of bilateral trade.

One study (Global Insight) employed a macro forecasting modeling of the FTA that used a stylized representation of the FTA and assumed all tariffs on bilateral trade between the Parties would be removed either immediately or over a 10-year period. In fact, U.S. tariffs on the most sensitive products are phased out over an 18-year period under the FTA, and in some cases base rates remain in place for a few very sensitive products (e.g., sugar and dairy products); so this modeling effort represents an upper bound of the potential effects on U.S. employment from liberalization of trade with Australia. In a similar vein, the other study (Brown, Kiyota, and Stern (BKS)) used a computable general equilibrium modeling approach that can be viewed as a simulation experiment that uses a stylized or hypothetical representation of the FTA that involves eliminating all tariffs and other trade barriers between the Parties. Again, this model predicts an upper bound on the potential U.S. employment effects from liberalization of trade between the Parties.⁴¹ Sections II.C and III.D of this review discuss the contents of the final version of the negotiated FTA.

A. Aggregate Economic Effects

This section of the report first presents the aggregate economic effects, then the sectoral employment effects, and finally the potential labor market effects on the United States. The Global Insight study found that the macroeconomic effects of the FTA on the U.S. economy would be positive but extremely small. Their study found that U.S. exports, imports, and employment would all rise slightly as the result of the FTA. The major conclusions of the Global Insight study concerning the aggregate economic effects of the FTA on the U.S. economy are discussed below and summarized in Table III.1:

- If tariffs on goods were eliminated immediately (the immediate scenario), real U.S. exports to Australia (measured in 1997 dollars) would rise by \$173 million in 2004 (1.37 percent above the predicted baseline for U.S. exports to Australia in

⁴¹ See Thomas Hertel, David Hummels, Maros Ivanic, and Roman Keeney, "How Confident Can We Be in CGE-based Assessments of Free Trade Agreements?" NBER Working Paper 10477 (Cambridge, MA: National Bureau of Economic Research, May 2004), p. 16; available at: <http://www.nber.org/papers/w10477>.

- 2004 and 0.020 percent above the predicted baseline for total U.S. exports) and by \$224 million in 2013 (1.24 percent above the baseline for U.S. exports to Australia in 2013 and 0.016 percent above the baseline for total U.S. exports). If the tariff cuts were phased in over ten years (the phase-in scenario), the incremental rise in real exports would be more gradual (starting at \$16 million above the baseline in 2004), reaching the same magnitude above the baseline as under the immediate scenario by 2013 (\$224 million).
- Under the immediate scenario, real U.S. imports from Australia (measured in 1997 dollars) would rise an additional \$115 million in 2004 (1.66 percent above the baseline) and \$137 million in 2013 (1.26 percent above the baseline). Under the phase-in scenario, real imports from Australia would increase more gradually (starting at \$8 million above the baseline in 2004), reaching nearly the same level as under the immediate scenario in 2013 (\$138 million). Real U.S. imports from all countries (total imports) would rise an additional \$121 million in 2004 (0.0089 percent above the baseline) and \$130 million in 2013 (0.0062 percent above the baseline) under the immediate scenario. Total imports would increase less rapidly as they approach 2013 because some of the increase in U.S. imports from Australia would come at the expense of increased U.S. imports from other countries. Under the phase-in scenario, total imports would increase more gradually (starting at \$12 million above the baseline in 2004), reaching \$147 million above the baseline in 2013, slightly above the amount above the baseline under the immediate scenario in that year.
 - The total impact on U.S. employment of trade liberalization under the two tariff removal scenarios includes direct, induced, and indirect effects. The direct effect on employment tends to be permanent (about the same amount above or below the baseline each year), while the indirect and induced effects tend to increase initially and then disappear as markets adjust and capacity constraints are reached (see Figure III.1). Since the direct effects are linked only to sectors that are directly affected by the removal of tariffs (i.e., goods-producing sectors such as agriculture, mining, and manufacturing), there are no direct effects on employment in construction and service-producing sectors since liberalizations in trade in services and construction were not factored into their modeling results; for these, the total effect includes only induced and indirect effects due to the direct effects of removing tariffs on goods.
 - Under the immediate scenario, U.S. employment would rise by an additional 3,038 jobs in 2004 (0.0027 percent above the baseline), peaking at 4,767 additional jobs in 2005 (0.0041 percent above the baseline), and then tapering off to 709 additional jobs in 2013 (0.0005 percent above the baseline) as the indirect and induced effects of the FTA begin to dampen and resource constraints begin to set in. Under the phase-in scenario, the number of additional jobs (above the forecasted baseline employment) would increase slowly but steadily from 276 in 2004 to 1,481 in 2013. The annual gains in U.S. employment that result from the FTA would be greater during the early years of the FTA under the immediate

tariff removal scenario than under the phase-in scenario, but they would diminish by year ten of the FTA as the annual gains under the phase-in scenario rise above those realized under the immediate scenario. Thus, the total number of jobs gained over the ten-year horizon will be slightly greater under the immediate scenario than under the phase-in scenario.

- Real U.S. GDP (measured in 1996 dollars) would average \$181 million a year above the baseline estimate (or 0.0016 percent above the baseline) over the period 2004-2013 under the immediate tariff removal scenario, while, under the phase-in scenario, it would average \$107 million above the baseline over the same period (or 0.0009 percent above the baseline). The immediate scenario shows a much larger impact in the early years (\$306 million above the baseline in 2004, peaking at \$413 million above in 2005) and then tapers off (to \$45 million above the baseline in 2013) as the trade stimulus due to the indirect and induced effects wear off and capacity constraints set in. In contrast, under the phase-in scenario, real GDP would rise steadily from \$34 million above the baseline in 2004 to \$143 million above in 2013 when all tariffs on Australian goods are finally removed.

Overall, the Global Insight study of the macroeconomic effects of the FTA suggests that the total effect of the FTA on the U.S. economy under either tariff removal scenario would be negligible.

Like the Global Insight study, the BKS study found that the macroeconomic effects for the United States of the FTA would be positive but very small. That study found that U.S. exports, imports, and output would all rise slightly as the result of removing all bilateral barriers to trade in goods and services under the FTA. The major conclusions of the BKS study concerning the aggregate economic effects of the FTA on the U.S. economy are:

- There would be relatively small increases in total U.S. exports (\$2.9 billion) for all sectors of the U.S. economy, but concentrated in services, textiles, and non-metallic mineral products.
- Increases in total U.S. imports (\$2.6 billion) would be concentrated in services; food, beverages, and tobacco; textiles; and agriculture.
- U.S. output would rise by relatively small percentages in most sectors.
- The FTA would boost global welfare by \$23.1 billion, with U.S. welfare increasing by \$19.4 billion (0.20 percent of U.S. GNP) and Australia's welfare increasing by \$5.4 billion (1.08 percent of Australia's GNP); the rest of the world would experience a negligible welfare effect. Welfare measures aggregate how consumption possibilities may change in a country (i.e., whether a country's population as a whole is worse or better off than before), but do not indicate how these gains will be distributed across segments of the society.

- Most of the welfare gains for each Party would come from the removal of services barriers (gains of \$16.8 billion for the United States and \$4.9 billion for Australia) and tariffs on manufactured goods (gains of \$2.6 billion for the United States and \$0.5 billion for Australia).
- The estimated changes in the real returns to both labor and capital (the factors of production in their model) due to the FTA would increase in both countries (by 0.02 percent for labor and 0.02 percent for capital in the United States and by 0.76 percent for labor and 0.66 for capital in Australia).

The BKS study does not yield aggregate employment effects. The CGE methodology used in that study estimates the changes in sectoral U.S. employment due to changes in production or output arising from the FTA under the assumption that there is no change in *total* U.S. employment (i.e., aggregate employment does not change, but is redistributed across economic sectors as the result of realizing new efficiencies arising from removing trade barriers between the United States and Australia).

B. Sectoral Employment Effects

Since the two Global Insight FTA impact scenarios involved only the removal of tariffs (but not the removal of quotas on goods or barriers to trade in services), the direct effects of the FTA account for most of the total effects on employment in the agricultural, mining, and manufacturing sectors—the goods-producing portion of the U.S. economy that is directly exposed to removal of tariffs on imported items they produce domestically.⁴² In contrast, the total effect of the FTA on U.S. employment in industries in the construction and service-producing sectors comes primarily from the indirect effects (93 percent of the total effect on U.S. employment in the service-producing sector and 54 percent of the total in the construction sector) and, to a much lesser extent, the induced effects (7 percent of the total in the service-producing sector and 46 percent of the total in the construction sector) as a result of changes in construction decisions and purchases of services by directly affected mines, manufacturers, or farms. (See Table III.2 and Figure III.2.)

Under the immediate scenario, even on a broad sectoral basis, the average annual employment effects of the FTA are negligible (measured as average annual percentage above the sector baseline employment): the manufacturing (0.0027 percent or 427 additional workers a year), construction (0.0020 percent or 133 additional workers a year), and service-producing (0.0014 percent or 1,303 additional workers a year) sectors each exhibit average annual employment gains of less than 0.003 percent, while the agriculture (-0.0012 percent or 28 fewer workers a year) and mining (-0.0024 percent or 12 fewer workers a year) sectors each exhibit average annual employment losses of less than 0.001 percent.

⁴² The sector definitions used in the Global Insight study are based on the North American Industry Classification System (NAICS). See Office of Management and Budget, Executive Office of the President, *North American Industry Classification System, United States, 2002* (Lanham, MD: Bernan, 2002).

Within the manufacturing sector, 13 industries showed very small annual average increases above baseline employment over the period 2004-2013, while seven industries showed annual average decreases or no change from baseline employment. Within the service-producing sector, all industries showed small annual average increases above baseline employment. Three industries exhibited relatively larger absolute and percentage annual average increases in employment: Industrial Machinery and Equipment (268 more jobs a year or 0.0157 percent above the baseline); Other Durable Goods (98 more jobs a year or 0.0245 percent above the baseline); and Textile Mill Products (55 more jobs a year or 0.0180 percent above the baseline). One industry (Food and Kindred Products) exhibited a negative absolute annual average change in employment (62 fewer jobs a year), but the change was insignificant when compared to overall industry employment (-0.0036 percent below the baseline) and is unlikely to be of consequence.

In the BKS study, which assumes that all bilateral trade barriers (i.e., agricultural barriers, quotas on goods, tariffs on manufactures, and barriers to trade in services) between the United States and Australia are removed at one time, the sectoral U.S. employment effects of the FTA are also extremely small.⁴³

The BKS study found that the type of trade barrier (agricultural barriers, tariffs on manufactures, or barriers to trade in services) removed on U.S. trade with Australia would affect sectoral U.S. employment in different ways. The tariff equivalents used in the BKS model for services barriers are generally much higher (while those for agricultural protections are generally only slightly higher) than the tariff rates applied on goods because of successive rounds of multilateral trade negotiations have lowered tariffs on goods. It would be expected that the model will generate much stronger effects as the result of removing barriers to trade in services. Their results show that the removal of agricultural trade barriers would increase U.S. employment in the mining, construction, manufacturing, and service-producing sectors, balanced by employment losses in the agriculture sector. Removal of tariffs on manufactured goods would increase U.S. employment in the manufacturing sector that would be offset by employment declines in the agriculture, mining, construction, and service-producing sectors. Removal of services trade barriers would result in employment increases in the agriculture, mining, and manufacturing sectors that would be balanced by employment declines in the construction and service-producing sectors (see Table III.3).

The BKS study also found that removal of all trade barriers (agricultural barriers, tariffs on manufactures, and service barriers) at one time under the FTA would result in increases in sectoral U.S. employment in agriculture, mining, and manufacturing that would be offset by declines in sectoral U.S. employment in the construction and the service-producing sectors. The implication is that, as the result of the FTA, U.S. workers

⁴³ The sector definitions used in the BKS study are based on aggregations of categories of the United Nations International Standard Industrial Classification System that were used in the GTAP database. See “Methods and Classifications” section of the United Nations Statistics Division’s website at <http://unstats.un.org/unsd/cr/registry/default.asp> for a description of the United Nations International Standard Industrial Classification System (ISIC).

would move from the sectors contracting in employment (construction and service-producing industries) into the sectors expanding in employment (agriculture, mining, and manufacturing), since total U.S. employment is held constant in their model. However, the size of the change in total employment in each sector would be extremely small: increases of 0.01 percent (or 94 more workers) in agriculture; 0.08 percent (or 504 more workers) in mining; 0.07 percent (or 13,948 more workers) in manufacturing; and declines of 0.01 percent (or 14,290 fewer workers) in service-providing industries and less than 0.01 percent (or 257 fewer workers) in construction—implying that sectoral employment adjustment to a new equilibrium under the FTA, which the authors suggest might take 2-3 years at a minimum to reach, would be negligible.

Within the manufacturing sector, employment is expected to expand in 10 industries and decline in only one as the result of the FTA. Two manufacturing industries exhibited relatively larger absolute and percentage changes in employment than the others: Machinery and Equipment and Instruments (6,229 jobs or 0.12 percent of industry employment) and Other Manufacturers and Furniture (653 jobs or 0.13 percent of industry employment). Three other industries exhibited relatively larger negative absolute changes in employment (756 few jobs in Food, Beverages, and Tobacco; 11,719 few jobs in Wholesale and Retail Trade and Transport Services; and 2,188 fewer jobs in Other Private Services), but those changes were insignificant when compared to overall industry employment (-0.04 percent, -0.03 percent, and -0.01 percent, respectively) and are unlikely to be of consequence.

C. Potential Labor Market Effects

More open trade with Australia is expected to lead to greater efficiencies in both the United States and Australia as the Parties concentrate production and exports of goods and services that they produce more efficiently as the result of better technology and increases in productivity. For the United States, these industries tend to be in high-wage industries and occupations. The FTA will create new employment opportunities in industries and occupations that pay better than average wages for the most part.

The results of both the Global Insight study and the BKS study suggest that U.S. employment would increase relatively more in several industries than in others as the result of the FTA; only a few industries would experience employment declines. All changes would be insignificant relative to total industry employment. To gain insight into the effect on occupational employment and wages for U.S. workers in the industries that the studies found would likely experience a relatively larger expansion in employment than the others, employment by occupation and average hourly wages are examined for these industries.

The analysis focused on the industries that Global Insight and BKS found would likely experience relatively greater change in both the number of workers employed and the percentage change in employment as a result of the U.S.-Australia FTA: Industrial

Machinery and Equipment, Other Durable Goods, and Textile Mill Products (from the Global Insight study); and Machinery and Equipment and Instruments, and Other Manufactures and Furniture (from the BKS study). Translated into the North American Industry Classification System (NAICS) industrial categories, these industries are: Computer and Electronic Product Manufacturing (NAICS 334);⁴⁴ Machinery Manufacturing (NAICS 333);⁴⁵ Medical Equipment and Supplies Manufacturing (NAICS 3391); Other Miscellaneous Manufacturing (NAICS 3399); Electrical Equipment, Appliance, and Component Manufacturing (NAICS 335);⁴⁶ Furniture and Related Product Manufacturing (NAICS 337);⁴⁷ Textile Mills (NAICS 313);⁴⁸ and Textile Product Mills (NAICS 314).⁴⁹ All of these industries fall within the manufacturing sector (NAICS 31-33), which embodied nearly 12 percent of U.S. non-farm employment in 2002.

The top-three occupational groups in 2002 were identified for each of the industries listed above. Seven occupational groups accounted for the top three occupations in these industries. The most prominent occupational category was production work, which was the top occupational group in each industry considered. Office workers and administrative support workers, transportation and material movers, and architects and engineers were the other leading occupational groups in most of these industries. Management occupations and installation, maintenance, and support occupations were less prominent, but were in the top three for several industries. Table III.4 provides a summary of the top occupations and their associated within-industry average hourly wages and employment shares for each industry identified by the Global Insight and BKS studies.

Since data on occupational wages and employment are available only at the 4-digit and 5-digit NAICS levels and cannot be aggregated for statistical reasons to a 3-digit level of classification, information in Table III.4 is presented for the within-industry range of occupational average hourly wages and employment share.

⁴⁴ Includes Computer and Peripheral Equipment Manufacturing (NAICS 3341); Communications Equipment Manufacturing (NAICS 3342); Audio and Video Equipment Manufacturing (NAICS 3343); Semiconductor and Other Electronic Component Manufacturing (NAICS 3344); Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345); and Manufacturing and Reproducing Magnetic and Optical Media (NAICS 3346).

⁴⁵ Includes Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331); Industrial Machinery Manufacturing (NAICS 3332); Commercial and Service Industry Machinery Manufacturing (NAICS 3333); Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334); Metalworking Machinery Manufacturing (NAICS 3335); Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336); and Other General Purpose Machinery Manufacturing (NAICS 3339).

⁴⁶ Includes Electric Lighting Equipment Manufacturing (NAICS 3351); Household Appliance Manufacturing (NAICS 3352); Electrical Equipment Manufacturing (NAICS 3353); and, Other Electrical Equipment and Component Manufacturing (NAICS 3359).

⁴⁷ Includes Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371); Office Furniture (including Fixtures) Manufacturing (NAICS 3372); and, Other Furniture Related Product Manufacturing (NAICS 3379).

⁴⁸ Includes Fiber, Yarn, and Thread Mills (NAICS 3131); Fabric Mills (NAICS 3132); and, Textile and Fabric Finishing and Fabric Coating Mills (NAICS 3133).

⁴⁹ Includes Textile Furnishings Mills (NAICS 3141) and, Other Textile Product Mills (NAICS 3139).

Production workers made up the largest occupational group in all of the industries listed in Table III.4. Their lowest employment share was in one industry (4-digit level) of computer and electronic product manufacturing; even there, the employment-share is more than 20 percent. The abundance of production workers is characteristic of the manufacturing industry as a whole, where they have historically made up the largest occupational group. In most industries found in Table III.4, production workers' average hourly wages fall below the average hourly wages in their respective industries; the only exception is found in machinery manufacturing, where the upper range average production worker wages lies within the industry-specific average range. In one-half of the industries in Table III.4, the range of average hourly wages for production workers was close to or near the national average for production workers (\$13.55).

The occupational category of office and administrative support workers is another major occupational group in the industries listed in Table III.4; this occupational group also made up a sizeable portion of non-farm occupations nationally (17.8 percent). Within the industries considered here, the range of average hourly wages for office and administrative support workers were near their particular industry average in the textile mills, the machinery manufacturing, and the furniture and related product manufacturing industries and were elsewhere below their respective industry range of average hourly wages. With the exception of textile product mills, the industry-specific average hourly wage for these workers at least met the national average hourly wage for office and administrative support workers (\$13.42) and in several industries surpassed the national average hourly wage; specifically, in the computer and electronic product manufacturing, machinery manufacturing, the medical equipment and supplies manufacturing, and the electrical equipment, appliance, and component manufacturing industries.

The employment share of transportation workers varies widely from 1.1 to 18.1 percent in the industries listed in Table III.4. The industry-specific average hourly wage range for this group was in each case below its industry-specific wage. Average hourly wages were below the national average in all listed industries except for machinery manufacturing, and computer and electronic product manufacturing, where the national average hourly wage were within the average hourly wage range.

Architects and engineers were well-represented in the computer and electronic product manufacturing, the machinery manufacturing, and the electrical equipment, appliance, and component manufacturing industries, but otherwise made up a small proportion of employment. For all industries, except computer and electronic product manufacturing, the range of average hourly wages for this occupational group was above its industry-specific range of averages. With the exception of the machinery manufacturing and the computer and electronic product manufacturing industries, the range of average hourly wages were below the national average hourly wage for architects and engineers.

Management occupations were found among the top three occupational categories only for the computer and electronic product manufacturing and the machinery manufacturing industries. This occupational group had the highest average hourly wage range of all

occupations featured in Table III.4. The range of average hourly wages earned by workers in management occupations was either close to or above the national average for management occupations (\$37.92), and in each industry were above its range of industry-specific average hourly wages.

Computer and mathematical science occupations were among the top three occupational categories only for the computer and electronic product manufacturing industry. There, average hourly wages for this group were above the range of industry-specific average hourly wages; they were also above the national average for computer and mathematical science workers (\$29.63).

For various reasons, male and female workers in the United States were disproportionately distributed among occupations and industries. For example, while women made up approximately 47 percent of the labor force in 2002, they comprised only 31 percent of manufacturing employment.⁵⁰ Since the U.S.-Australia FTA is likely to increase jobs in manufacturing, it is natural to ask how these changes might affect male and female workers differently. To address this question, we consider the distribution of men and women in the occupations discussed above.

In 2002, full-time production and architectural and engineering positions in the United States were filled mainly by men.⁵¹ For these occupations, it is reasonable to expect that male workers in manufacturing may benefit relative to female workers in the form of more jobs.⁵² However, also in 2002, women made up three-quarters of full-time office and administrative support workers.⁵³ The median earnings for this group was 97 percent of the median weekly earnings for both sexes, suggesting that the wage range for this occupational group given in Table III.4 applies to both male and female workers. Office and administrative support positions make up a significant share of jobs in the industries predicted to experience employment growth and pay well relative to production and transportation and material moving jobs. Given the large share of women nationally in this occupation group, women may also benefit from the FTA in terms of increased employment. Thus, it appears that women are not disproportionately represented in occupations and industries more likely to expand in employment as the result of the FTA.

D. Features in the FTA to Ease the Adjustment Process

⁵⁰ U.S. Bureau of Labor Statistics, *Employment and Earnings*, 50:1 (January 2003), Table 16, p. 180.

⁵¹ U.S. Bureau of Labor Statistics, *Employment and Earnings*, Table 39 "Median weekly earnings of full-time wage and salary workers by detailed occupation and sex," (January 2003), pp. 204-209.

⁵² A similar pattern was seen for production occupations and architectural and engineering occupations among full-time employees in 2003. U.S. Bureau of Labor Statistics, *Employment and Earnings*, Table 39 "Median weekly earnings of full-time wage and salary workers by detailed occupation and sex," January 2004, pp. 249-253.

⁵³ A similar pattern was seen for office and administrative support positions among full-time employees in 2003. U.S. Bureau of Labor Statistics, *Employment and Earnings* (January 2003), Table 39; "Median weekly earnings of full-time wage and salary workers by detailed occupation and sex," (January 2004), pp. 249-253.

The FTA has mechanisms to help ease any adjustment process in the United States during the transition to bilateral free trade with Australia; these include the gradual phase-out of U.S. tariffs on sensitive agricultural goods originating from Australia and mechanisms to address injurious increases, if any, in imports from Australia.

1. *Rules of Origin and Anti-Circumvention Provisions*

The FTA contains strict rules of origin, including requirements that specify that items must undergo substantial transformation within the United States or Australia to be eligible for benefits under the FTA. Operationally, this means a change in HTS classification—either a change from one subheading (6-digit HTS) to another within or outside the group, a new heading (4-digit HTS), or a new chapter (2-digit HTS), and, for some items, meeting a specific regional content rule of 35-55 percent of the value of the item, depending on the method of valuation used.

Textile and apparel goods produced or assembled by a Party must meet a “yarn forward” rule (i.e., be produced from yarns or fabrics that originated in either Party) in order to be considered as originating from a Party and eligible for preferential treatment under the FTA.

The FTA contains a *de minimis* provision for goods that do not meet the requirements of the agreement to be considered as originating from one of the Parties. Generally, if the value of materials used in the production of a good does not undergo the required change in HTS classification and does not exceed 10 percent of the adjusted value of the good, and the good otherwise meets all other applicable criteria, it qualifies as an originating good. There are, however, some exceptions to this general rule.⁵⁴

The FTA contains provisions that commit each Party to enforce its own laws related to circumvention. Circumvention means providing false declaration or information for the purpose or effect of violating or avoiding existing customs, country of origin labeling, or trade laws of the respective Parties. Examples of circumvention include illegal

⁵⁴ For textile and apparel goods made of non-originating fibers or non-elastomeric yarns used in the production of a component of a good that determines the tariff classification of the good that do not undergo the applicable change in tariff classification for the good, the total weight of all such fibers or yarns in that component does not exceed 7 percent of the total weight of that component. In other cases, the *de minimis* rule does not apply to: non-originating dairy products, bird eggs, natural honey, and some other edible products of animal origin used in the production of other like products or in ice cream, dried milk, animal feeds, or juice products; non-originating fresh or dried citrus fruit used in the production of juices; non-originating animal or vegetable fats and oils, prepared edible fats, or animal or vegetable waxes used in the production of lards, greases, or other oils; non-originating cane or beet sugar and chemically pure sucrose in solid form used in the production of other sugar products; non-originating sugar and confectionary products and cocoa powder used in the production of other cocoa powders; non-originating beer, wine, vermouth, and other fermented beverages; undenatured ethyl alcohol; and spirits, liqueurs, and other spiritous beverages used in the production of other spirits and beverages; and non-originating live animals, vegetables, fats and oils, and prepared food stuffs used in the production of similar goods unless the non-originating material is provided for in a different subheading of the Harmonized Tariff Schedule than the good from which origin is being determined.

transshipment and false declarations concerning country of origin and product content or description.

2. *Safeguards*

The FTA contains several safeguard mechanisms—a general bilateral safeguard, a price-based and volume-based agriculture safeguard, and a textile and apparel emergency action safeguard—that should provide additional means of dealing with any adverse employment effects.

a. General Bilateral Safeguard

If as a result of the reduction or elimination of a customs duty under the FTA, an originating good of the other Party is being imported into the territory of a Party during the FTA's transition period (10 years following the date of entry into force or the longer tariff elimination period for certain goods) in such quantities so as to be a substantial cause of serious injury, or threat thereof, to a domestic producer of a like or directly competitive product, the Safeguards Chapter of the FTA (Chapter 9) allows the importing Party to: suspend the further reduction of any rate of customs duty on a good provided for under the FTA for that good; increase the customs rate of duty on a good to a level not to exceed the lesser of the MFN/NTR applied rate of duty on the good in effect on the day at the time the action is taken and the MFN/NTR applied rate of duty on the good in effect on the day immediately preceding the date of entry into force of the FTA; or, in the case of a customs duty applied to a good on a seasonal basis, increase the rate of duty to a level not to exceed the lesser of the MFN/NTR applied rate of duty that was in effect on the good for the immediately preceding corresponding season, and the applied MFN/NTR rate of duty that was in effect on the good on the day immediately preceding the date of entry into force of the FTA.

A safeguard action may not be in place for longer than two years, but may be extended by up to two years if the competent authorities determine the safeguard measure continues to be necessary. Neither Party may impose a bilateral safeguard measure more than once on the same good. The Party taking the action must provide compensation or be subject to withdrawal of substantially equivalent concessions by the other Party. Each Party retains its rights and obligations for global safeguard actions under Article XIX of GATT 1994 and the WTO Agreement on Safeguards. A Party taking a global safeguard action may exclude imports from the other Party if that Party's imports are not a cause of serious injury, or threat of serious injury.

b. Bilateral Agricultural Safeguards

Agricultural safeguard measures (Article 3.4 of the FTA) may also be taken during the tariff elimination period for agricultural goods subject to a tariff snap-back mechanism, and for beef, a permanent safeguard will be in place.

Under the price-based horticultural safeguard mechanism, if the unit import price of the good is more than 10 percent below the trigger price for that item, as specified in Annex 3-A of the FTA, a percentage (based on the spread between the unit import price and the trigger price) of the MFN/NTR duty rate may be assessed as an additional duty.⁵⁵

Under the quantity-based beef safeguard mechanism, if, in years 9-18 of the FTA, the volume of originating beef imports under the annual FTA preferential tariff-rate quota exceeds 110 percent of the volume specified in the tariff-rate quota provisions, the United States may impose an agricultural safeguard measure in the form of an additional duty equal to 75 percent of the difference between the MFN/NTR rate of duty and the FTA preferential rate of duty. This measure may be maintained only until the end of the year in which it was imposed.

Under the permanent price-based beef safeguard mechanism, starting in year 19 of the FTA, the United States may impose an agricultural safeguard measure on originating beef entering the United States annually in aggregate quantity that exceeds the sum of the quantity entered under Australia's country-specific WTO tariff-rate quota and 70,000 metric tons (the level in year 18 of the FTA preferential tariff-rate quota). The second amount will grow at an annual rate of 0.6 percent starting in year 19 of the FTA. Imports in excess of this aggregate volume will be subject to increased duties if the U.S. beef prices fall below a certain price level. This price-based safeguard utilizes a comparison of the monthly average index price (based on the price of U.S. boxed select-grade beef) with a specified trigger price (6.5 percent less than the rolling average of the previous 24 months average index prices). For details on the operation of the price-based safeguard, see the U.S. Department of Agriculture's Foreign Agricultural Service fact sheet on beef for the U.S.-Australia FTA.⁵⁶

The total duty collected on an originating good under an agricultural safeguard measure must not exceed the lesser of the prevailing MFN applied rate of duty, or the MFN applied rate of duty in effect on the day immediately preceding the date of entry into force of the FTA. Neither Party may, with respect to the same agricultural good, at the same time, impose or maintain an agricultural safeguard measure under this Article and a safeguard measure under Chapter 9 of the FTA, or a measure under Article XIX of GATT 1994 and the WTO Safeguards Agreement. Further, neither Party may impose an agricultural safeguard measure that increases an in-quota duty on an agricultural good subject to a tariff-rate quota.

c. Textile and Apparel Bilateral Emergency Action Safeguard

If as a result of the reduction or elimination of a customs duty under the FTA, an originating textile or apparel good benefiting from preferential tariff treatment under the FTA is being imported into the territory of a Party in such increased quantities, in

⁵⁵ This safeguard provision applies to: dried onions and onion powder or flour; dried garlic and garlic powder or flour; preserved or prepared tomatoes, tomato pastes, sauces, and puree; preserved or prepared asparagus, pears, apricots, peaches, and certain pear or peach fruit mixtures; and orange and grape juices.

⁵⁶ The fact sheet is available at: <http://www.fas.usda.gov/info/factsheets/AusFTA/beef.html>.

absolute terms or relative to the domestic market for that good, and under such conditions as to cause serious damage, or actual threat thereof, to a domestic industry producing a like or directly competitive good, the importing Party may, to the extent and for such time as may be necessary to prevent or remedy such damage and to facilitate adjustment, take emergency action, consisting of an increase in the rate of customs duty on the good to a level not to exceed the lesser of the MFN/NTR applied rate of duty in effect at the time the action is taken and the MFN/NTR applied rate of duty in effect on the date of entry into force of the FTA (see Article 4.1: Bilateral Emergency Actions in the FTA). In critical circumstances where delay would cause damage that would be difficult to repair, a Party may take emergency action pursuant to a preliminary determination on a provisional basis not to exceed 200 days.

A bilateral emergency safeguard action may not be in place for longer than two years, but may be extended up to two years if the competent authorities determine the safeguard measure continues to be necessary. No emergency action against a good may be taken or maintained beyond the period ending ten years after customs duties on that good have been eliminated pursuant to the FTA. No emergency action may be taken more than once by an importing Party against any particular good of the exporting Party. Upon termination of the emergency action, the rate of customs duty will be the rate that would have been in effect but for the emergency action. The Party taking the action must provide compensation or be subject to withdrawal of substantially equivalent concessions by the other Party. Each Party retains its rights and obligations under the WTO Agreement on Textiles and Clothing (which is set to expire on January 1, 2005) and for global safeguard actions under Article XIX of GATT 1994 and the WTO Agreement on Safeguards.

3. *Gradual Phase-in of the FTA*

Table III.5 summarizes the tariff removal phase-in schedule for U.S. import tariffs on non-agricultural goods originating from Australia as well as the phase-in schedule for removal of Australia's tariffs on non-agricultural goods originating from the United States under the FTA. Clearly, the bulk of the value of two-way non-agricultural trade (99-100 percent) will become duty-free upon the initiation of the FTA, with most of the balance becoming duty-free by year seven of the FTA, leaving only a small number of most-sensitive items on both sides becoming duty-free by year ten of the FTA. For non-agricultural textile goods, tariffs will be phased out reciprocally by the Parties over a 10-year period, with the bulk of the value of textile trade (about 92 percent) becoming duty-free in year twelve of the FTA.

Tables III.6 and III.7, respectively, present a summary of the indicative product content of each tariff removal phase-in category (tariff staging category) for U.S. tariffs on goods originating from Australia and Australia's tariffs on goods originating from the United States.

The United States will eliminate most of its tariffs on industrial goods and consumer products that originate from Australia upon entry into force of the FTA. Other import-

sensitive items such as agricultural products, textiles and apparel, footwear, glassware, ceramic tiles, and table china have longer tariff phase-out periods to allow for adjustment. The longest phase-out period (18 years) is provided for especially sensitive agricultural products with additional provisions for tariff-rate quotas (duty-free up to a specified level with amounts in excess subject to duty) during the implementation period and a tariff snap-back safeguard mechanism (reinstatement of duties) for some of these items. The United States will provide preferential tariff-rate quotas for Australian peanuts, tobacco, cotton, avocados, beef, and dairy products. U.S. over quota import duties on most cheese and dairy products will be kept at base rates, but Article 3.6 of the FTA provides that either Party may after year 20 of the FTA request consultations on the possibility of modifying market access commitments for the dairy goods subject to tariff-rate quotas. U.S. tariffs for imports of Australian sugar will be maintained at base rates and there is no increase in quota access for Australian sugar.

Most of Australia's tariffs on U.S. industrial goods and consumer products will be eliminated upon the entry into force of the FTA. Again, the longest phase-out period (twelve years) of Australia's tariffs is reserved for some especially sensitive textile and apparel products, with tariffs on some textiles and apparel, chemicals, and motor vehicles phased out within seven years, and some tariffs on footwear within ten years.

Since Australia is not a party to the WTO Agreement on Trade in Civil Aircraft that eliminates tariffs on civil aircraft and civil aircraft engines, parts, and components, the FTA will provide immediate duty-free access to Australia's civilian aircraft market for U.S. exporters.

Australia is one of the few developed countries that is not a party to the WTO Agreement on Government Procurement. Under the FTA, U.S. suppliers are granted immediate non-discriminatory rights to bid on contracts let by numerous central government entities, and significant access to state procurement.

The U.S. service-producing sector is also expected to benefit from opening of the Australian services sector (lowering of barriers to trade) to U.S. services imports under the FTA.

IV. The Labor Chapter in the FTA, Including the Labor Cooperation Mechanism

A. Overview

The Labor Chapter of the FTA—Chapter 18—fully meets the relevant provisions of the Trade Act of 2002 (Trade Act). The FTA promotes internationally recognized core labor standards, obligates each of the Parties to effectively enforce their respective labor laws, and makes the effective enforcement of a Party’s labor laws subject to the same State-to-State dispute settlement procedures that apply to the other chapters.

The Labor Chapter of the U.S.-Australia FTA closely tracks the corresponding labor chapters of the Chile and Singapore FTAs, while including modifications to reflect the relatively advanced state of labor law and practice in Australia and the nature of the Australian federal/sub-federal system as it relates to labor. Whereas in the United States, federal labor law covers all core labor standards defined in the Labor Chapter, under Australia’s federal system, much of the coverage is under the jurisdiction of state and territorial governments.

B. Labor and the Trade Act

The Trade Act sets out a number of provisions with respect to labor rights and standards that must be included in an agreement for it to be considered under the special Trade Act procedures.

As overall negotiating objectives, the United States is to:

- foster economic growth, raise living standards, and promote full employment in the United States and to enhance the global economy;
- seek the promotion of worker rights and the rights of children consistent with the ILO’s core labor standards and an understanding of the relationship between trade and worker rights;
- seek provisions in trade agreements by which the parties strive to ensure not to weaken or reduce the protections afforded in domestic labor law as an encouragement for trade; and
- promote universal ratification and compliance with ILO Convention 182 *Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor*.

As principal negotiating objectives with respect to labor, the United States is to:

- ensure that the parties to a trade agreement do not fail to effectively enforce their labor laws through a sustained or recurring course of action or inaction in a manner affecting trade between the parties;
- recognize that the parties to a trade agreement retain discretionary authority in the enforcement of their labor laws;
- strengthen the capacity of U.S. trading partners to promote respect for core labor standards; and
- ensure that labor, health or safety practices of parties to trade agreements do not arbitrarily discriminate against U.S. exports or serve as disguised barriers to trade.

As a principal negotiating objective with respect to dispute settlement and enforcement, the United States is to seek provisions to treat principal negotiating objectives equally with respect to:

- the ability to resort to dispute settlement procedures;
- the availability of equivalent dispute settlement procedures; and
- the availability of equivalent remedies.

As a negotiating objective with respect to the worst forms of child labor, the United States is to seek commitments by parties to trade agreements to vigorously enforce their laws against the worst forms of child labor.

In the promotion of certain priorities, the United States is to:

- seek greater cooperation between the ILO and the WTO;
- seek to establish consultative mechanisms with the parties to trade agreements to strengthen their ability to promote respect for core labor standards and compliance with ILO Convention 182, and report to the Senate Finance Committee and House Ways and Means Committee on the content and operation of such mechanisms; and
- review the impact of future trade agreements on employment in the United States and report to the Senate Finance Committee and the House Ways and Means Committee.

In pursuing these objectives and priorities, the President is to:

- direct the Secretary of Labor to consult with any country seeking a trade agreement with the United States concerning that country's labor laws and provide technical assistance to that country if needed;

- submit to the Senate Finance Committee and the House Ways and Means Committee a meaningful report on labor rights in any country with which the United States plans to implement a trade agreement; and
- submit to the Congress a report describing the extent to which any country with which the United States plans to implement a trade agreement has laws governing exploitative child labor.

The Trade Act defines core labor standards as: (1) the right of association; (2) the right to organize and bargain collectively; (3) a prohibition on the use of any form of forced or compulsory labor; (4) a minimum age for the employment of children; and (5) acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.

C. Summary of FTA Chapter 18: Labor

Chapter 18 of the U.S.-Australia FTA consists of eight Articles as follows:

- In Article 18.1, the Parties reaffirm their obligations as members of the ILO and their commitments under the ILO *Declaration on Fundamental Principles and Rights at Work and Its Follow-up*. The Parties agree that they shall strive to ensure that such labor principles and the internationally recognized labor principles and rights as defined in the Trade Act of 2002 are recognized and protected by domestic law.
- Under Article 18.2, the Parties agree that they shall not fail to effectively enforce their labor laws, through a sustained or recurring course of action or inaction, in a manner affecting trade between the Parties. The labor laws included under this provision are defined as those related to the internationally recognized labor rights listed in Article 18.7 below. This section represents the primary obligation of the Parties under the agreement and a violation of this obligation is subject to the equivalent government-to-government dispute settlement procedures that apply to the other chapters of the FTA. The provision recognizes the Parties' authority to exercise discretion regarding investigatory, prosecutorial, regulatory, and compliance matters.

Under this Article, the Parties further recognize that it is inappropriate to encourage trade or investment by weakening or reducing the protections afforded in domestic labor laws and agree that each Party shall strive to ensure that it does not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such laws in a manner that weakens or reduces adherence to internationally recognized labor rights, as an encouragement for trade with the other Party, or as an encouragement for the establishment, acquisition, expansion, or retention of an investment in its territory.

- Article 18.3 provides for procedural guarantees and public awareness in which the Parties agree to ensure that interested and affected persons have access to judicial and non-judicial tribunals for the enforcement of the Parties' labor laws and may seek enforcement of their rights. The Parties further agree to ensure that proceedings are fair, equitable, and transparent and to promote public awareness of their labor laws.
- Article 18.4 establishes the institutional arrangements for the chapter. Oversight of the Labor Chapter will be exercised by the FTA's Joint Committee, but the Parties may establish a subcommittee on Labor Affairs to meet and discuss the implementation of the chapter. Article 18.4 also provides for the designation by each Party of a point of contact within its labor ministry. The points of contact are to provide for public input and submissions on matters related to the agreement and coordinate the development and implementation of the cooperative activities outlined under Article 18.5.
- Article 18.5 establishes a labor cooperation mechanism (LCM) between the Parties to promote respect for workers' rights and the rights of children consistent with the core labor standards of the ILO. The LCM is considerably less elaborate than those included in the Chile and Singapore FTAs, reflecting primarily the relatively advanced state of the labor law and practice regimes of Australia and the United States, and current cooperative efforts.
- Article 18.6 establishes a mechanism for consultations between the Parties to resolve any matter that may arise under the chapter. If a Party believes that the other Party is not in compliance with its effective enforcement obligation in Article 18.2, the Party may either seek consultations under the Labor Chapter or may invoke the consultations provisions of the Dispute Settlement Chapter.
- Article 18.7 sets forth a list of the internationally recognized labor principles and rights that includes: (1) the right of association; (2) the right to organize and bargain collectively; (3) a prohibition on the use of any form of forced or compulsory labor; (4) a minimum age for the employment of children and the prohibition and elimination of the worst forms of child labor; and (5) acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.

This Article also defines the scope of the labor laws that are subject to the disciplines of the Labor Chapter. For the United States, labor laws means acts of the U.S. Congress, and regulations promulgated pursuant to such an act, related to the worker rights specified in the Chapter, and which are enforceable by action of the federal government. For Australia, coverage includes acts of a parliament of Australia (state or federal), or regulations promulgated pursuant to such acts, directly related to the rights set forth in this Article.

Under the dispute settlement procedures, if a dispute settlement panel finds that a Party has not conformed to its obligations to effectively enforce its labor laws, the losing Party may settle the case. If the Parties are unable to reach agreement on a settlement, the panel would establish an annual monetary assessment. The assessment would be paid into a fund for appropriate labor initiatives, including efforts to improve or enhance labor law enforcement. If the losing Party fails to pay the assessment, the other Party would be entitled to suspend tariff benefits under the FTA sufficient to collect the assessment, while bearing in mind the Agreement's objective of eliminating barriers to bilateral trade and while seeking to avoid unduly affecting parties or interests not party to the dispute.

Appendix

The following summarizes the different methodologies used in the two contract studies of the impact of the FTA that are discussed in Chapter III of this review.

In the one study, the macroeconomic forecasting firm Global Insight used an integrated set of proprietary econometric models to assess the U.S. employment impact of the proposed FTA. The models are based on estimated historical statistical and behavioral relationships among key measures of the U.S. economy. Their analysis assumed that all tariff barriers between the Parties to the FTA are removed, but it did not take into account any liberalization of import quotas on goods or trade in services between the Parties. Global Insight examined two forecast scenarios: (1) Immediate—the immediate removal of all tariff barriers between the Parties on January 1, 2004, and (2) Phase in—the gradual removal of these barriers over the 10-year period 2004-2013. Their analysis provided annual forecasts of the economic impact of the FTA, as measured by the difference between the forecast under each tariff removal scenario and the baseline forecast (no change in tariffs). For each scenario, the time paths of the short-term effects of the agreement on U.S. output, international trade, and employment were calculated. In addition, changes from baseline U.S. employment due to the implementation of the FTA under each scenario were calculated over the period 2004-2013 by detailed U.S. industry to show how industrial employment might adjust over time to the FTA.

The Global Insight analysis estimated the direct, indirect, and induced effects of the tariff removal under the FTA. The direct effect captures the effect of bilateral tariff elimination or reduction on U.S. imports and U.S. exports; it was estimated using Global Insight's World Trade Model (which contains 70 countries or aggregate regions and 77 commodity categories) with no or lower tariffs on trade between the Parties. The expenditure-induced effect gauges the multiplier impact of the FTA on the U.S. economy and any corresponding higher demand for imports from Australia and the rest of the world; it was estimated by running the direct trade impacts derived from their World Trade model through their U.S. Macro model and then re-running their World Trade model. The indirect effect measures the effect of an increase in the exports from one industry on the output of another industry; it was estimated using their Industry Model (input-output based with 128 U.S. industries) with results from their World Trade and U.S. Macro Models. The total effect of the FTA on each variable is equal to the sum of the direct, indirect, and induced effects.⁵⁷

In the other study, Professors Drusilla Brown of Tufts University, Kozo Kiyota of Yokohama National University and the University of Michigan, and Robert Stern of the University of Michigan (BKS) used their version of the multi-country computable

⁵⁷ Global Insight prepared a methodology paper for the U.S. Department of Labor that describes more fully the individual models and linkages used in their assessment of the U.S. employment impact of the FTA; the paper is available upon request from the U.S. Department of Labor.

general equilibrium Michigan Model of World Production and Trade,⁵⁸ to evaluate the economic effects (including sectoral employment changes) of the proposed FTA.

The BKS study assumes that all trade barriers between the Parties are removed at the same time and are not phased out over time. The study simulates the effects of the removal of agricultural barriers, manufactures tariffs, and service barriers by both Parties. Non-tariff measures are estimated with tariff equivalents of the barrier. The services barriers are based on financial data on average gross (price-cost) margins, measured relative to the world's economy with the lowest margin in a sector. BKS notes that the tariff equivalents used to approximate services barriers are considerably higher than the tariff barriers on merchandise imports and may be subject to overstatement.

The version of the Michigan Model used in the BKS study is a CGE model of world production and trade that contains 18 economic sectors in each of 22 countries or world regions.⁵⁹ The model incorporates some aspects of increasing returns to scale, monopolistic competition, and product variety. The data for the model are based on Version 5.4 of the Purdue University Center for Global Trade Analysis Project (GTAP) database for 1997, together with some data derived from other sources, which were updated and recalibrated to the year 2005 (the year in which the Uruguay Round of trade liberalizations will be fully implemented). The model is static in the sense that it is based on a single set of equilibrium conditions rather than relationships that vary over time. Therefore, the model's time horizon depends on the assumptions made about which variables adjust, or do not adjust, to changing market conditions and the short- or long-term nature of these adjustments. The model assumes the aggregate, economy-wide level of employment is held constant in each country. Thus, the effects of trade liberalization are not allowed to affect a country's overall rate of employment or unemployment. This assumption was made because overall employment is determined by macroeconomic factors and policies that are not contained in the model. The model focuses on changes in the composition of employment across industrial sectors as determined by the microeconomic interactions of supply and demand resulting from trade liberalization. In this model, employment will expand in some sectors and decrease in others, with no change in aggregate employment. No assumptions are made about growth in productivity or the rate of economic growth. (In contrast, the baseline forecast used in the Global Insight study builds in these types of assumptions.) Also, the Michigan Model, like the set of Global Insight models, makes no assumptions about changes in foreign direct investment.

⁵⁸ Multi-country computable general equilibrium (CGE) models are based on microeconomic foundations and simulate the workings and inter-relationships of all producing, consuming, and investing, savings, and trading sectors of an economy. CGE models are used to analyze the effects of trade liberalization on the composition of output, employment, trade and wages across economic sectors and factors of production. CGE models generally assume full employment (or that the aggregate level of employment does not change) and focus on the change in industrial composition of employment resulting from trade liberalization.

⁵⁹ For further information about the model, see <http://www.Fordschool.umich.edu/rsie/model>.

Tables and Figures

Table II.1: Top 10 NAICS-based U.S. Exports to Australia in 2002

U.S. Export Industry	NAICS Code	Value of U.S. Exports to Australia (\$mil.)	Percent of	
			Total U.S. Industry Exports	All U.S. Exports to Australia
Total U.S. Exports to Australia	--	12,294	2.0	100.0
<u>Of which, the 10 leading NAICS-based were:</u>				
Aerospace products and parts	33641	3,133	5.9	25.5
Special classification provisions	99000	603	2.5	4.9
Computer equipment	33411	528	1.8	4.3
Navigational, measuring, and medical instruments	33451	480	1.9	3.9
Pharmaceuticals and medicines	32541	433	2.3	3.5
Construction machinery	33312	425	7.2	3.5
Medical equipment and supplies	33911	349	3.2	2.8
Agricultural implements	33311	342	8.2	2.8
Engines, turbines, power transmission equipment	33361	314	2.6	2.6
Autos and light duty motor vehicles	33611	282	1.4	2.3

Note: The value of U.S. exports is the free alongside ship (FAS) value at the U.S. port of export of domestic U.S. exports.

Source: U.S. Department of Labor tabulations of official U.S. trade statistics from the U.S. Department of Commerce, Bureau of Census.

Table II.2: Top 10 NAICS-based U.S. Imports from Australia in 2002

U.S. Import Industry	NAICS Code	Value of U.S. Imports from Australia (\$mil.)	Percent of	
			Total U.S. Industry Imports	All U.S. Imports from Australia
Total U.S. Imports from Australia	--	6,398	0.6	100.0
<i>Of which, the 10 leading NAICS-based were:</i>				
Meat products and meat packaging products	31161	1,097	23.0	17.1
U.S. goods returned	98000	459	1.3	7.2
Wines	31213	458	14.0	7.2
Alumina, aluminum, and processing	33131	408	5.8	6.4
Oil and gas	21111	362	0.5	5.7
Autos and light duty motor vehicles	33611	311	0.3	4.9
Other metal ores	21229	222	36.0	3.5
Women's and girls' apparel	31523	190	0.6	3.0
Navigational, measuring, and medical instruments	33451	189	0.8	2.9
Iron, steel, and ferroalloys	33111	167	1.2	2.6

Note: The value of U.S. imports is the customs value (the appraised value of the merchandise, exclusive of import duties, freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the port of exportation) of U.S. imports for consumption (the amount that immediately enters U.S. consumption channels, but not bonded warehouses or Foreign Trade Zones).

Source: U.S. Department of Labor tabulations of official U.S. trade statistics from the U.S. Department of Commerce, Bureau of Census.

Table III.1: Total Effect on Real U.S. Exports, Real Imports, Employment, and Real GDP under the U.S.-Australia FTA based on Global Insight's Immediate and Phase-in Tariff Removal Scenarios

Item and Scenario	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10	Average
	2004	2005	2006	2007	2008	2013	2004-2013
U.S. Exports to Australia (mil. 1997 dollars):							
Immediate	173	179	185	190	196	224	199
(% from baseline)	(1.37)	(1.36)	(1.34)	(1.33)	(1.32)	(1.24)	(1.30)
10-year Phase In	16	34	53	74	95	224	112
(% from baseline)	(0.13)	(0.26)	(0.38)	(0.52)	(0.64)	(1.24)	(0.70)
U.S. Imports from Australia (mil. 1997 dollars):							
Immediate	115	89	94	98	104	137	112
(% from baseline)	(1.66)	(1.23)	(1.24)	(1.23)	(1.24)	(1.26)	(1.28)
10-year Phase in	8	17	27	38	51	138	64
(% from baseline)	(0.12)	(0.23)	(0.36)	(0.48)	(0.61)	(1.27)	(0.70)
U.S. Employment (number of jobs)							
Immediate	3,038	4,767	2,195	1,213	1,047	709	1,823
(% from baseline)	(0.0027)	(0.0041)	(0.0019)	(0.0010)	(0.0009)	(0.0005)	(0.002)
10-year Phase in	276	740	915	759	819	1,481	1,025
(% from baseline)	(0.0002)	(0.0006)	(0.0008)	(0.0006)	(0.0007)	(0.0011)	(0.001)
U.S. GDP (mil. 1996 dollars)							
Immediate	306	413	230	158	138	45	181
(% from baseline)	(0.0030)	(0.0039)	(0.0021)	(0.0014)	(0.0012)	(0.0003)	(0.0016)
10-year Phase In	34	70	88	95	103	143	107
(% from baseline)	(0.0003)	(0.0007)	(0.0008)	(0.0008)	(0.0009)	(0.0011)	(0.0009)

Source: Global Insight (2004).

**Table III.2: Sectoral Employment Effects of the U.S.-Australia FTA Under Global
Insight's Immediate Tariff Removal Scenario**
(number of employees and percent change from baseline employment)

Change in U.S. Sector Employment	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 10 2013	Average 2004-2013
<u>All Industries</u>							
Direct	356	326	374	379	388	402	375
Indirect	1,950	3,051	1,602	1,068	769	511	1,296
Induced	732	1,390	219	-234	-110	-204	152
Total	3,038	4,767	2,195	1,213	1,047	709	1,823
Percent change from baseline	0.0027%	0.0041%	0.0019%	0.0010%	0.0009%	0.0005%	0.002%
<u>Agriculture</u>							
Direct	-25	-26	-26	-26	-27	-31	-28
Indirect	0	0	0	0	0	0	0
Induced	0	0	0	0	0	0	0
Total	-25	-26	-26	-26	-27	-31	-28
Percent change from baseline	-0.0011%	-0.0012%	-0.0012%	-0.0012%	-0.0012%	-0.0014%	-0.001%
<u>Mining</u>							
Direct	-18	-17	-14	-13	-11	-8	-12
Indirect	0	0	0	0	0	0	0
Induced	0	0	0	0	0	0	0
Total	-18	-17	-14	-12	-11	-7	-12
Percent change from baseline	-0.0032%	-0.0032%	-0.0027%	-0.0024%	-0.0022%	-0.0016%	-0.002%
<u>Construction</u>							
Direct	0	0	0	0	0	0	0
Indirect	93	429	269	90	74	-144	72
Induced	133	369	103	146	70	-59	61
Total	226	799	372	236	144	-204	133
Percent change from baseline	0.0033%	0.0115%	0.0052%	0.0032%	0.0019%	-0.0024%	0.002%
<u>Manufacturing</u>							
Direct	400	369	414	418	426	441	415
Indirect	31	28	13	14	12	-2	12
Induced	4	6	-3	-3	0	0	0
Total	435	403	424	429	438	439	427
Percent change from baseline	0.0028%	0.0025%	0.0026%	0.0027%	0.0027%	0.0028%	0.003%
<u>Service- Producing</u>							
Direct	0	0	0	0	0	0	0
Indirect	1,826	2,593	1,320	963	682	657	1,212
Induced	595	1,014	119	-375	-180	-145	91
Total	2,421	3,610	1,438	587	502	512	1,303
Percent change from baseline	0.0028%	0.0040%	0.0016%	0.0006%	0.0005%	0.0005%	0.001%

Note: Direct, indirect, and induced employment effects may not sum to total due to rounding.

Source: Global Insight (2004).

**Table III.3: Michigan Model Estimates of the Changes in U.S. Employment
Due to Removal of Trade Barriers in Agriculture, Manufacturing, and Services
Under the U.S.-Australia FTA**

(number of workers affected and percent change in sector employment)

Sector	Removal of Agricultural Barriers	Removal of Manufactures Tariffs	Removal of Service Barriers	Total
Agriculture	-97 (0.00%)	-1,103 (-0.03%)	1,295 (0.04%)	94 (0.01%)
Mining	1 (0.00%)	-72 (-0.01)	575 (0.09%)	504 (0.08%)
Construction	1 (0.00%)	-46 (0.00%)	-212 (0.00%)	-257 (0.00%)
Manufacturing	59 (0.00%)	2,861 (0.01%)	11,028 (0.05%)	13,948 (0.07%)
Service-Producing	36 (0.00%)	-1,639 (0.00%)	-12,688 (-0.01%)	-14,290 (-0.01%)

Source: Brown, Kiyota, and Stern (2004).

Table III.4: Industry-Specific Occupational Employment Share and Hourly Wage, 2002
(Top Occupational Groups for Selected Industries)

Industry/Item	All Occupations	Production Occupations	Office Workers and Administrative Support Occupations	Transportation and Material Moving Occupations	Architecture and Engineering Occupations	Management Occupations	Installation, Maintenance, and Repair Occupations	Computer and Mathematical Science Occupations
All Non-farm Establishments								
Share of all workers (percent)	100	8.4	17.8	7.4	1.9	5.6	4.1	2.2
Average hourly wage (dollars)	--	\$13.55	\$13.42	\$13.09	\$27.89	\$37.92	\$17.20	\$29.63
Computer and Electronic Product Manufacturing (NAICS 334)								
Share of within industry employment (percent)	--	23.3 - 47.6	8.5 - 18.1	1.1 - 18.1	4.5 - 23.2	7.1 - 10.2	2.4 - 3.3	2.6 - 20.2
Average hourly wage (dollars)	18.68 - 28.90	12.14 - 14.28	15.31 - 16.86	11.07 - 13.41	26.01 - 33.88	47.33 - 54.99	18.44 - 21.25	29.72 - 36.60
Machinery Manufacturing (NAICS 333)								
Share of within industry employment (percent)	--	41.1 - 64.4	7.9 - 13.3	2.3 - 5.0	5.5 - 13.3	5.0 - 9.2	2.4 - 5.4	1.0 - 4.9
Average hourly wage (dollars)	15.96 - 21.27	13.26 - 17.16	14.11 - 16.07	11.64 - 13.56	22.82 - 27.91	39.51 - 45.34	16.83 - 20.24	24.89 - 31.93
Medical Equipment and Supplies Manufacturing (NAICS 3391)								
Share of within industry employment (percent)	--	56.1	13.6	5.0	5.7	6.6	2.0	1.5
Average hourly wage (dollars)	17.70	13.50	14.20	11.16	26.71	46.80	18.07	29.13
Electrical Equipment, Appliance, and Component Manufacturing (NAICS 335)								
Share of within industry employment (percent)	--	56.2 - 62.7	8.6 - 11.9	3.3 - 11.6	4.3 - 10.3	3.5 - 6.2	3.0 - 4.8	0.9 - 1.5
Average hourly wage (dollars)	15.78 - 17.77	12.34 - 13.57	14.10 - 14.91	12.07 - 13.08	24.59 - 27.00	43.39 - 44.20	17.51 - 18.63	26.73 - 30.31
Other Manufacturing (NAICS 3399)								
Share of within industry employment (percent)	--	54.2	14.4	7.4	2.1	6.2	3.0	0.9
Average hourly wage (dollars)	15.52	12.18	13.42	10.71	24.17	41.56	16.69	25.58
Furniture and Related Product Manufacturing (NAICS 337)								
Share of within industry employment (percent)	--	62.3 - 68.5	8.7 - 11.8	7.0 - 10.3	0.4 - 0.8	4.1 - 5.4	1.6 - 2.6	0.3 - 0.8
Average hourly wage (dollars)	13.49 - 15.63	11.52 - 12.91	12.72 - 14.11	11.10 - 11.98	20.60 - 25.09	35.58 - 40.00	15.46 - 17.04	21.74 - 25.23
Textile Mills (NAICS 313)								
Share of within industry employment (percent)	--	58.3 - 69.0	5.0 - 13.2	8.0 - 10.7	0.7 - 1.1	2.8 - 5.1	4.5 - 11.2	0.3 - 2.7
Average hourly wage (dollars)	12.39 - 14.37	11.11 - 11.66	12.73 - 13.69	10.44 - 10.49	19.10 - 27.48	37.99 - 42.39	13.53 - 15.10	22.67 - 24.26
Textile Product Mills (NAICS 314)								
Share of within industry employment (percent)	--	61.20 - 64.9	10.8 - 11.0	7.4 - 13.7	0.4 - 0.8	3.5 - 5.2	3.4 - 5.1	0.30
Average hourly wage (dollars)	12.18 - 12.86	10.48 - 10.56	12.23	9.78 - 9.84	22.74 - 23.47	37.64 - 39.17	13.83 - 14.38	20.80 - 24.13

Note: “—” indicates not available. National average hourly wages and occupational distribution of workers are collected by the U.S. Bureau of Labor Statistics in their Occupational Employment Statistics, a semiannual mail survey that measures occupational employment and wage rates for workers in non-farm establishments. Industry-specific data are collected by the U.S. Bureau of Labor Statistics, using a national survey of employers. The survey covers all states, industries (including farm and non-farm) and establishments regardless of size; however, self-employed persons are not represented in the estimates.

Source: U.S. Bureau of Labor Statistics, 2002.

Table III.5: Bilateral Tariff Removal Phase-In Schedule for Non-Agricultural Goods under the U.S.-Australia FTA

A. Non-Agricultural and Non-Textile Goods

Tariff Line Items Duty-Free Beginning of Year & Staging Category	Phase out of U.S. Tariffs on Australian Goods				Phase out of Australia's Tariffs on U.S. Goods			
	Number of Tariff Lines	Percent of Tariff Lines	2002 Import Value (\$thous.)	Percent of Import Value	Number of Tariff Lines	Percent of Tariff Lines	2002 Import Value (\$thous.)	Percent of Import Value
Immediate A/E; EIF	6932	99%	\$3,697,341	100%	4327	99%	\$12,199,499	99%
Year 4 B-US	72	1%	\$1,290	0%	-	-	-	-
Year 7 C-US; B-Australia	2	0%	\$8,617	0%	17	0%	\$10,963	1%
Year 10 D	26	0%	\$36	0%	9	0%	\$1,088	0%
Total	7032	100%	\$3,707,285	100%	4353	100%	\$12,211,550	100%

Note: The value of imports is based on U.S. imports from Australia and Australian imports from the United States in 2002 in U.S. dollars. For definitions of the staging categories, see notes to Tables III.9 and III.10.

Source: Office of the U.S. Trade Representative, Office of the Asia and the Pacific.

B. Non-Agricultural Textile Goods

Tariff Line Items Duty-Free Beginning of Year & Staging Category	Phase out of U.S. Tariffs on Australian Goods				Phase out of Australia's Tariffs on U.S. Goods			
	Number of Tariff Lines	Percent of Tariff Lines	2002 Import Value (\$thous.)	Percent of Import Value	Number of Tariff Lines	Percent of Tariff Lines	2002 Import Value (\$thous.)	Percent of Import Value
Immediate A/E	477	30%	\$20,000	7%	NA	NA	NA	NA
Year 7 T1	190	12%	\$2,000	1%	NA	NA	NA	NA
Year 10 TX/T2/T3	924	58%	\$255,000	92%	NA	NA	NA	NA
Total	1591	100%	\$277,000	100%	NA	100%	NA	100%

Note: The value of imports is based on U.S. imports from Australia in 2002; comparable data by staging category were not available for the phasing out of Australian tariffs on imports of U.S. textile and apparel goods, but the Australian textile and apparel elimination is reciprocal to the U.S. textile and apparel tariff elimination. For definitions of the staging categories, see notes to Tables III.9 and III.10.

Source: Office of the U.S. Trade Representative, Office of the Asia and the Pacific.

Table III.6: U.S. Tariff Staging for Imports from Australia under the FTA

Duty Free Beginning of Year	Tariff Staging Category and Indicative Product Content
1 (immediate)	A: Some agricultural and the majority of industrial items currently subject to duty. E: Items now duty-free, continue duty-free.
4	B: Ambergris; ornamental foliage; frozen beans; certain mushrooms and fiddleheads; dates; pecans, hazelnuts, walnuts, almonds, and water chestnuts; fresh watermelon; prepared coffee and green tea; dried fruit; frozen berries; rice; certain flours; fats and oils; prepared poultry meats; clam juice; chewing gum; pasta; bulgar wheat; yeasts; cigars; peppermint oil; dried egg albumin; inedible gelatin; stearic and oleic acids; household porcelain or china; certain chain saw blades; certain hand tools and measuring devices; condensers for steam vapor power units; ball bearings and parts; cathode-ray television camera tubes and parts; and cameras and telescopes and parts.
7	T1: Textile and apparel items. Items in HTS 2918.90.20 (Other aromatic pesticides) and HTS 8111.00.45 (Unwrought manganese).
8	C: Rubber conveyor belts with textile materials; rubber gloves; ceramic tiles, pipes, and flags; certain glassware; rough shaped or swan precious stones other than diamonds; ferrosilicon chromium; steam turbines for boats; and parts of telescopic sights for rifles.
10	D: Fluid whey and buttermilk; certain yogurt; certain non-butter dairy spreads; goat and sheep milk cheeses; dried bird eggs; fresh cut roses; leeks, cauliflower, kale, artichokes, celery, okra, brussels sprouts, sweet corn, spinach, potatoes, mushrooms, and sweet potatoes; figs; fresh cantaloupes; frozen pineapples; mangoes; melons; soybean oil; certain chocolate and confectionary products; prepared citron and citrus; tomato ketchup; cigarettes; unimproved wool; footwear; porcelain or china hotelware; and certain drinking glasses and glassware. J: Foreign valued added to items entered under HTS 99802 provisions; and spare parts for vessels installed before first entry into the United States.
11	Wine
12	TX: Textile and apparel items. T2: Textile and apparel items. T3: Textile and apparel items.
18	F: Over-quota rates on certain tariff-rate quotas for: peanuts; tobacco; cotton; and Goya cheese. ^a Also, certain asparagus and mushrooms; preserved artichokes; dried onions and onion powder; dried garlic; dates other than whole; wheat gluten; fruits of Pimenta or Capsicum; prepared or preserved pears, apricots, and other preserved fruits; grape and citrus juice; casein; tomato sauces; prepared mustard; alcohol for beverages; and certain rum and tafia. G: Over-quota rates on tariff-rate quotas for avocados. ^a H: Over-quota rates on tariff-rate quotas for beef. ^b
Duties Remain At the Base Rate	I: Cane and beet sugar; sugars and sugar syrups; molasses; amounts in excess of tariff-rate quotas on: certain dairy products including certain creams and ice cream; condensed milk; butter; non-fat dried milk powder and skim milk powder; other milk powder; other dairy products; cheddar cheese; American cheese; Swiss-type cheese; and European-type cheese. ^c Also, certain chocolate and low fat chocolate crumb.

Notes: The base rates are column 1 rates in effect on January 1, 2004. This table assumes that year 1 is 2005.

^a These goods are also subject to a FTA preferential tariff-rate quota (i.e., immediately duty-free up to an increasing annual quantity with staged tariffs applied to the amounts in excess of that quantity; the preferential tariff-rate quotas expire at the end of the staging period and the item is then duty-free in unlimited quantities on a first-come, first-served basis).

^b For the quantities explicitly reserved for Australia under the U.S. country-specific WTO tariff-rate quota, duty-free upon entry into force of the FTA. Beef is also subject to a FTA preferential tariff-rate quota with certain conditions (i.e., if the quantity of U.S. beef exports is greater than the quantity of U.S. beef exports in 2003, or by year 3, duty-free up to an annual increasing quantity with staged tariff applied to amounts in excess of that quantity; duty-free on January 1 of year 18).

^c For the quantities explicitly reserved for Australia under the U.S. country-specific WTO tariff-rate quota, duty-free upon entry into force of the FTA with amounts in excess subject to a FTA preferential tariff-rate quota (i.e., immediately duty-free up to an increasing

(Table III.6—continued)

annual quantity with the base rates applied to the amounts in excess of that quantity, years 1-17; starting in year 18, the quantities are increased at a specified compound annual growth rate.

The staging categories are defined as follows:

A: Tariffs are eliminated upon entry-into-force of the Agreement.

B: Four equal annual reductions, beginning on the date of entry into force of the FTA; duty-free January 1 of year 4.

C: Eight equal annual reductions, beginning on the date of entry into force of the FTA; duty-free January 1 of year 8.

D: Ten equal annual reductions, beginning on the date of entry into force of the FTA; duty-free January 1 of year 10.

E: Already duty-free on the date of entry into force of the FTA, continue duty-free.

F: Eighteen equal annual reductions in duties; duty-free January 1 of year 18.

G: Base rate, years 1-6; reduction of 5.6%, years 7; annual reductions of 5.6%, years 8-12; annual reductions of 11.1%, year 13-18; duty-free January 1 of year 18.

H: Base rate, years 1-8; reduction of 6.7%, year 9; annual reductions of 6.7%, years 10-13; annual reductions of 13.1%, years 14-18; duty-free January 1 of year 18.

I: Duties remain at the base rate.

J: HTS 9802.00.60; 9802.00.80; and 9818.00.05: rates that would apply to article in Chapters 1-97 under the FTA staging; duty-free January 1 of year 10.

HTS 2918.90.20 and HTS 8111.00.45: Duties removed in equal annual stages, beginning on the date that the FTA enters into force; duty-free January 1, 2010.

T1: If base rate is greater than 3%, then 3% upon entry into force of the Agreement through December 31, 2009; duty-free January 1, 2010.

TX: If base rate is greater than 3% but less than 5.5%, the 0.9% of base rate until December 31, 2009; lower of base rate on December 31, 2009 or 3% until December 31, 2014; duty-free January 1, 2015.

T2: If base rate is greater than 3% but less than 8%, the 0.9% of base rate until December 31, 2009; lower of base rate on December 31, 2009 or 3% until December 31, 2014; duty-free January 1, 2015.

T3: If base rate is greater than 3% but less than 15.5%, the 0.9% of base rate until December 31, 2009; lower of base rate on December 31, 2009 or 8% until December 31, 2014; duty-free January 1, 2015.

Wine: Depending on the tariff line item, one of the following six staging formulas:

(i) Base rate, years 1-7; reduced by 7.7% from base rate, year 8; reduced by 35.9% from base rate, year 9; reduced by 64.1% from base rate, year 10; duty-free, January 1 of year 11.

(ii) Base rate, years 1-10; duty-free January 1 of year 11.

(iii) Base rate, years 1-7; reduced by 2.7% from base rate, year 8; reduced by 32.4% from base rate, year 9; reduced by 62.2% from base rate, year 10; duty-free January 1 of year 11.

(iv) Base rate, years 1-9; reduced by 41.7% from base rate, year 10; duty-free January 1 of year 11.

(v) Annual reductions from the base rate, beginning on the date of entry into force of the FTA of 16.3%, 24.4%, 32.6%, 40.7%, 48.8%, 57.0%, 65.1%, 73.3%, 81.4%, 89.6%; duty-free January 1 of year 11;

(vi) Base rate, years 1-9; reduced by 33.3% from base rate, year 10; duty-free January 1 of year 11.

Source: *United States-Australia Free Trade Agreement*, Chapter 2.

Table III.7: Australia's Tariff Staging for Imports from the United States under the FTA

Duty Free Beginning of Year	Tariff Staging Category and Indicative Product Content
1 (immediate)	EIF: Items already duty-free, continue duty-free; items currently subject to duty that become duty-free upon entry-into-force of the Agreement.
7	B: Certain carboxylic acids; and passenger motor vehicles, new or used. T1: Textile and apparel items.
10	D: Footwear
12	Tx: Textile and apparel items. T2: Textile and apparel items. T3: Textile and apparel items.

Notes: The base rates are the general rates in effect on 1 Jan 2004. This table assumes that year 1 is 2005.

The staging categories are defined as follows:

EIF (Entry-into-Force): Duty-free upon entry into force of the Agreement.

B: Equal annual reductions in duties, beginning on entry into force; duty-free 1 Jan 2010 (year 7).

D: Ten equal annual reductions in duties, beginning on entry into force; duty-free 1 Jan of year 10.

T1: 3% duty until 31 Dec 2009; duty-free 1 Jan 2010 (year 7).

Tx: 5.5% duty until 31 Dec 2009; 3% duty until 31 Dec 2014; duty-free 1 Jan 2015 (year 12).

T2: 8% duty until 31 Dec 2009; 3% duty until 31 Dec 2014; duty-free 1 Jan 2015 (year 12).

T3: 15% duty until 31 Dec 2009; 8% duty until 31 Dec 2014; duty-free 1 Jan 2015 (year 12).

Source: *United States-Australia Free Trade Agreement*, Chapter 2.

Figure III.1
Change from Baseline U.S. Employment Due to the U.S.-Australia FTA under
Global Insight's Immediate and Phase-in Scenarios

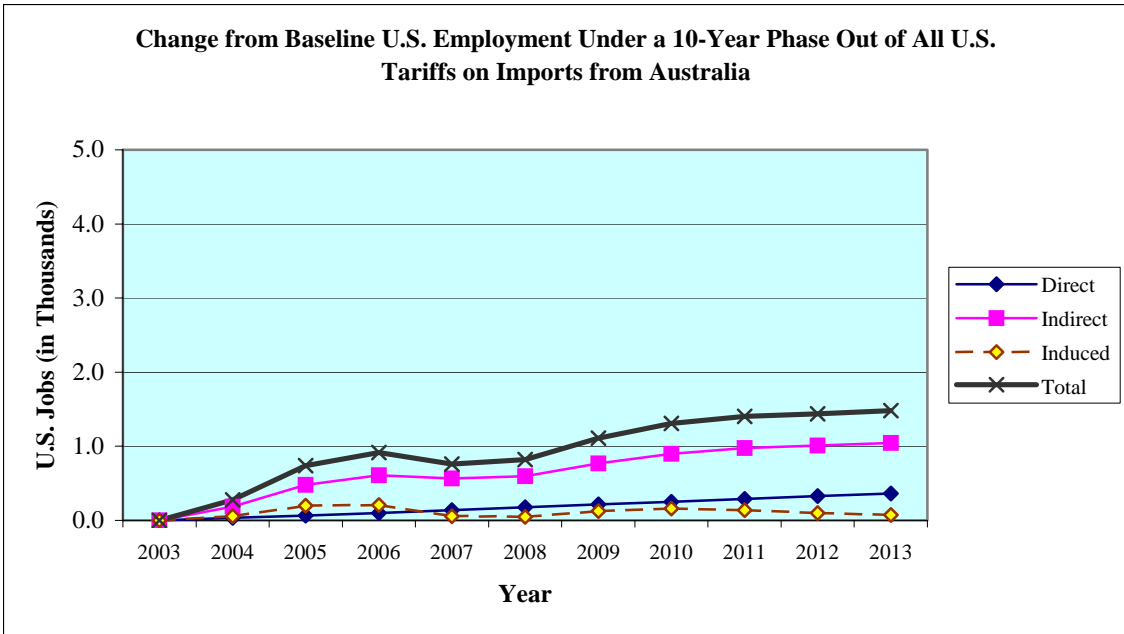
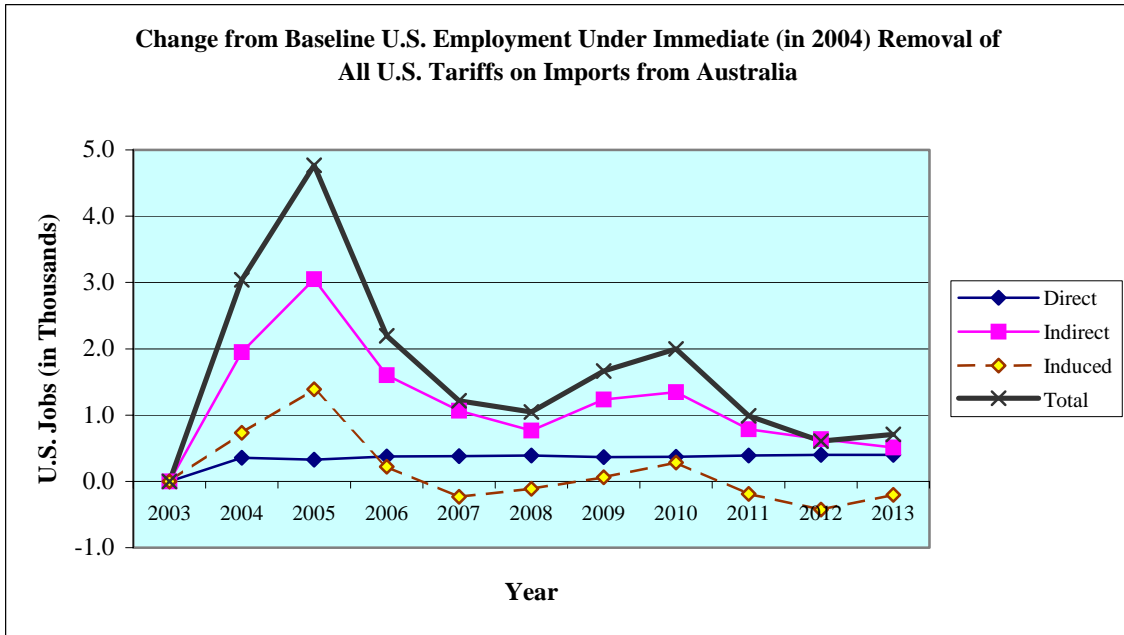
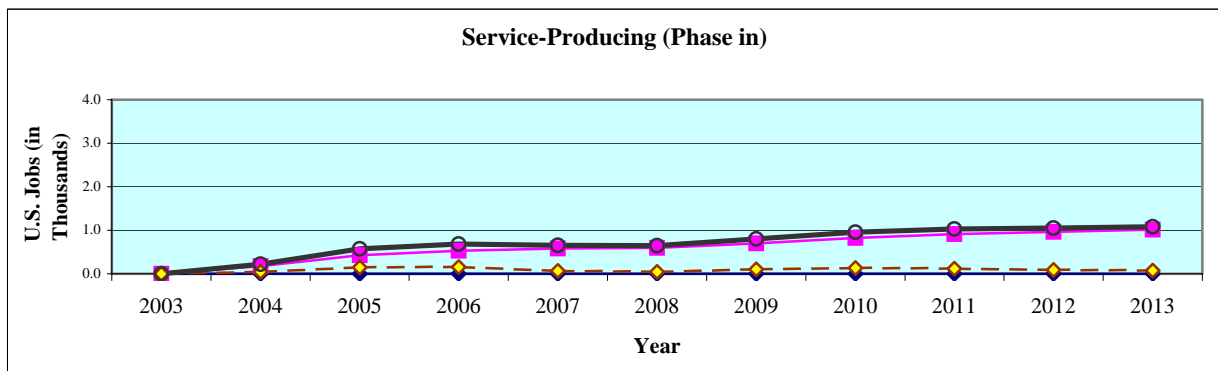
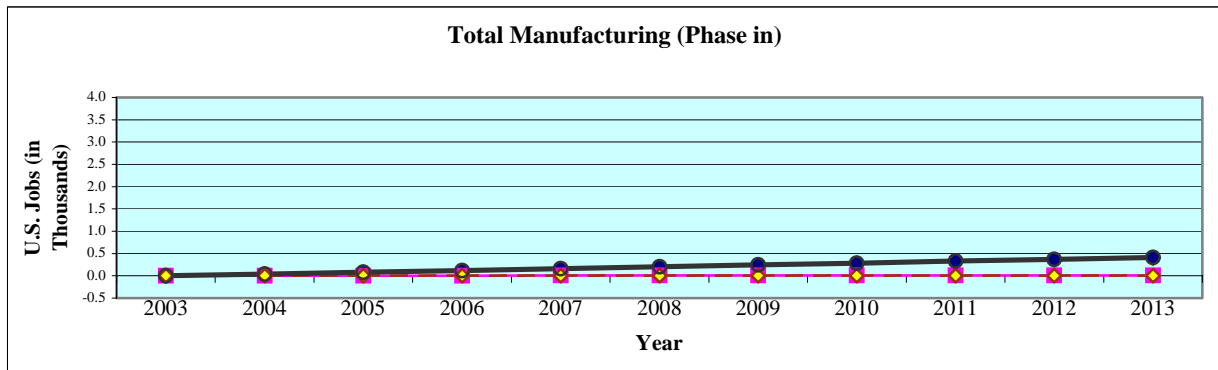
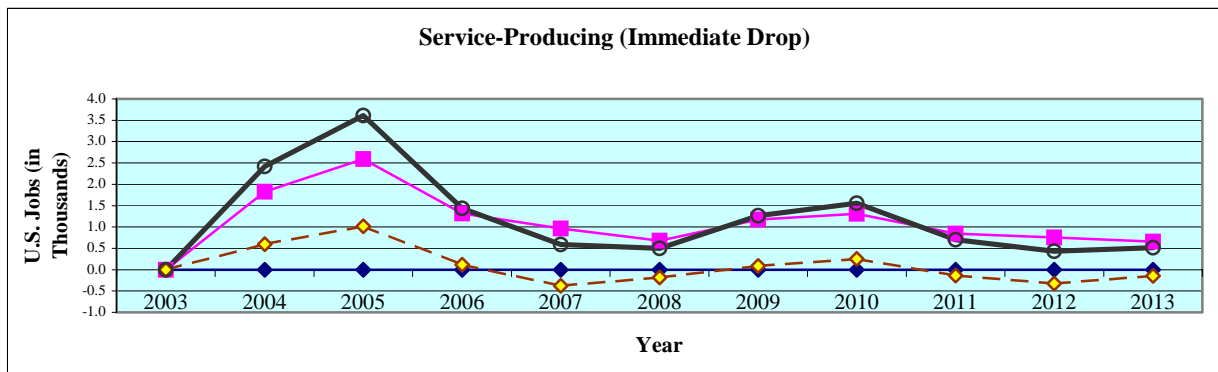
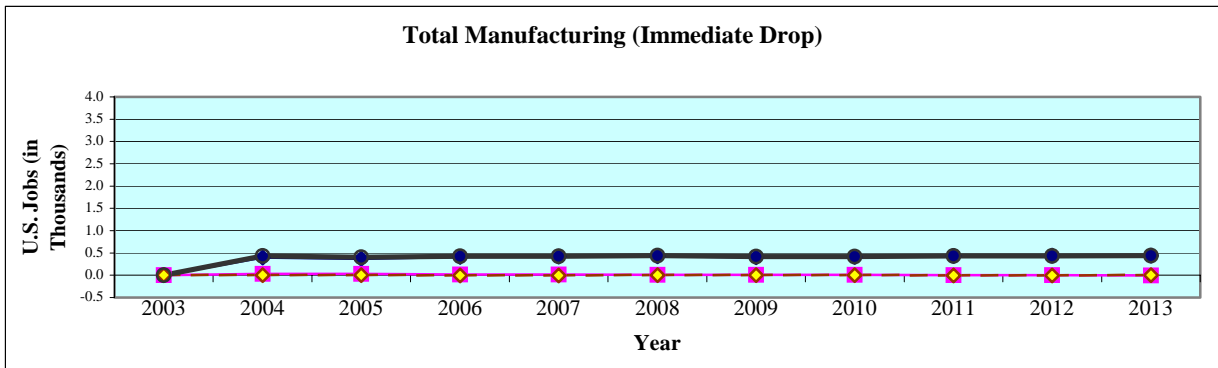


Figure III.2: Change from Baseline U.S. Employment in Manufacturing and Service Producing Industries Under Global Insight's Immediate (in 2004) and Phase-in Tariff Removal Scenarios



Total Effect
 Induced Effect
 Direct Effect
 Indirect Effect

