

CAPITAL TRADE, INCORPORATED

Economic Impact of the Miscellaneous Tariff Bill

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Executive Summary

The Miscellaneous Trade and Technical Corrections Act is a biennial legislative package made up primarily of legislation to suspend tariffs on hundreds of imported products that are not produced in the United States. The so-called miscellaneous tariff bill (“MTB”) process has been around for decades and has normally engendered little controversy. The primary purposes of the MTB is to help U.S. manufacturing facilities become more competitive by reducing the costs of imported intermediate products and materials and to eliminate tariffs that amount to “nuisance taxes.”

The individual bills that make up the MTB are vetted by the U.S. International Trade Commission (USITC), Administration agencies, and congressional committees that prepare the legislation to ensure that they cover products that are not produced domestically and are generally not controversial.

This report analyzes the economic impact of a new MTB composed of the many tariff suspension bills now being considered by the 111th Congress. Because new MTB legislation would allow U.S. manufacturers to reduce costs and become more competitive, **U.S. production is estimated to increase by \$4.6 billion.** This increased production drives several economic benefits including **expanding the U.S. real GDP by \$3.5 billion.** Particularly during periods of relatively high unemployment the MTB also substantially increases U.S. employment. **Under current conditions, the MTB is likely to support 90,000 American jobs.**

The economic benefits derived from the MTB are proportionately higher than other economic gains from tariff reduction because there is no domestic competition for MTB products. In most instances of tariff reductions – for example, under a free trade agreement – there are also economic costs because some domestic production is displaced by rising imports. This is not the case with the MTB.

The economic estimates made in this report were generated using a GTAP applied general equilibrium model and data base version 7 and a sample data base of tariff suspension bills drawn from the individual MTB bill reports produced by the USITC.

The 110th Congress failed to pass MTB legislation. The U.S. economy still enjoyed benefits from the three year MTB tariff suspensions passed in the 109th Congress, but the opportunity was lost to capture further economic gains by enacting new tariff suspensions. Based on the estimates included in this report, the 111th Congress would contribute to the recovery and overall strength of the U.S. economy by passing comprehensive MTB legislation as soon as possible.

I. Introduction

This study quantifies the benefits of the lower import duties resulting from the miscellaneous tariff bill (“MTB”). The MTB is shorthand for the Miscellaneous Trade and Technical Corrections Act, a biennial legislative package assembled by Congress that establishes temporary suspension or reductions in import duties for hundreds of specific products. The last MTB was passed on December 9, 2006 by the 109th Congress. The 110th Congress did not produce an MTB, but many requests made during the 110th Congress are still pending.

The MTB process is not as well known, or as controversial, as other bills reducing U.S. tariff levels, such as the North American Free Trade Agreement implementing legislation. The lack of controversy is likely due to the purpose of the MTB process. Specifically, the bill helps U.S. manufacturers compete at home and abroad by lowering the cost of imported inputs that are not made domestically (or where there is no domestic opposition).¹ This lack of domestic production implies that few U.S. workers would be adversely affected by a temporary suspension or reduction of tariffs on products named in the MTB. Moreover, it is the Senate’s practice to pass the MTB by unanimous consent. Even the opposition of one Senator can prevent the bill from becoming law. This practice helps to ensure that the products for which duties are reduced are non-controversial.

This report is organized as follows. Section II contains a brief description the MTB legislative process. The economics of MTB duty reductions are addressed in Section III. The methodology and data used to assess the benefits of the MTB are described in Section IV. The economic impact assessment of the MTB utilizes the Global Trade Analysis Project’s applied general equilibrium model and data base and a random sample of House bills from the 110th Congress.² To provide an indication of the types of products included in the MTB, Section V contains a brief analysis of the data base compiled for this study. The simulation results are presented in Section VI.

II. The MTB legislative process

The MTB process works as follows. The Committee on Ways and Means in the House of Representatives issues a public notice requesting members of Congress to introduce tariff legislation or miscellaneous corrections to the trade laws by a set deadline.³ The Senate Committee on Finance also invites Senators to submit items for possible inclusion in the MTB,⁴ though this invitation is not concurrent with the notice issued by Ways and Means. Members of Congress issue individual bills requesting a temporary suspension or reduction of duties on imports of specific products.

¹ See **Exhibit 1**.

² The GTAP data base and model are maintained by the Center for Global Trade Analysis of the Department of Agricultural Economics at Purdue University.

³ See **Exhibit 1**. “The Committee on Ways and Means has jurisdiction over legislation to amend the U.S. tariff schedule and to make corrections to trade legislation.”

⁴ See **Exhibit 2**.

The U.S. International Trade Commission (“USITC”), an independent, quasi-judicial federal agency established by Congress with a wide range of trade-related mandates, prepares legislative analyses known as “bill reports.” These analyses investigate the legal and economic effects of proposed tariff reductions and duty suspensions for the specific products, and are used by the House Committee on Ways and Means and the Senate Committee on Finance during consideration of tariff-related legislation.⁵ Office of Tariff Affairs and Trade Agreements (“TATA”) carries out the USITC’s responsibilities with respect to the Harmonized Tariff Schedule (“HTS”) of the United States and the international Harmonized System. TATA staff also work with the Office of Industries to prepare bill reports requested by Congress pertaining to proposed tariff reductions and duty suspensions for specific products.⁶

In preparing its bill reports, USITC reviews the product description and tariff classification in each of the bills, solicits comments from industry, reports on any domestic opposition to a bill, and estimates the duty loss associated with each bill. Other government agencies are also involved in the process. The Congressional Budget Office (“CBO”) uses the USITC’s duty loss estimates to score each bill. The United States Trade Representative, U.S. Customs and Border Protection, and the Department of Commerce also review the individual bills that are collected in the MTB.⁷

The USITC ultimately produces a brief report that includes information on the company responsible for the bill’s introduction; product information, including uses/applications and sources of imports; suggested article descriptions for enactment, including the appropriate HTS subheading; the projected level of imports; and the estimated revenue loss. The USITC approves this bill report as a formal memorandum to the Committee on Ways and Means of the House or the Committee on Finance of the Senate.

The various approved bills are aggregated into a single bill, which is voted on by the House. After the package of MTBs is passed by the House, the bill is referred to the Committee on Finance, where it may expand due to bills introduced in the Senate but not the House. Once the bill is passed by the Senate and any differences are worked out between the chambers, the bill goes to the President, who may sign or veto the measure.

The 106th Congress enacted H.R. 435 in January 1999 and H.R. 4868 in 2000, both of which were ultimately signed into law. In 2002, the House of the 107th Congress passed H.R. 5385, which was not enacted. But many of these provisions were ultimately incorporated into H.R. 1047, which was enacted by the 108th Congress in January 2004, and signed into law that December. The 109th Congress enacted two MTBs that ultimately became law, the first as part of H.R. 4, the Pension Protection Act of 2006, and the second as part of H.R. 6111, the Tax Relief and Health Care Act of 2006. A summary of recent MTB legislation signed into law is presented below in **Table 1**.

⁵ United States International Trade Commission, *Year in Review 2007* USITC Publication 4002 (November 2007) at 22.

⁶ *Id.* at 27.

⁷ See **Exhibit 3**.

Table 1. Recent Miscellaneous Tariff Bills Signed into Law⁸

| House Bill No. | Congress | Enacted | Signed | Estimated Number of Products | | |
|----------------|----------|-----------|------------|------------------------------|------------|-------|
| | | | | Suspensions /reductions | Extensions | Total |
| H.R. 435 | 106th | 1/6/1999 | 6/25/1999 | 228 | | 228 |
| H.R. 4868 | 106th | 1/24/2000 | 11/9/2000 | 170 | 21 | 191 |
| H.R. 1047 | 108th | 1/20/2004 | 12/3/2004 | 347 | 96 | 443 |
| H.R. 4 | 109th | 1/3/2006 | 8/17/2006 | 196 | 84 | 280 |
| H.R. 6111 | 109th | 12/8/2006 | 12/20/2006 | 383 | 137 | 520 |

III. The economics of MTB tariff reductions

In the comparative static framework of analysis, a tariff reduction in a large economy typically benefits consumers of the imported product at the expense of domestic producers, who manufacture a competing product, and the government, which collects the tariffs. Consumers pay less for the imported product, and demand more of it, because they no longer have to pay an import tariff. The consumer surplus therefore rises.⁹ Domestic producers of the competing product lose competitiveness relative to imports. In a perfectly competitive market, theory tells us domestic producers will sell less, and at a lower price. The producer surplus consequently declines.¹⁰ The government experiences a reduction in tariff revenue as a result of the tariff suspensions.¹¹ Because the increase in the consumer surplus typically exceeds the decline in producer surplus and taxes, there is a net welfare gain in the importing country.

However, the gains and losses largely offset, as demonstrated in **Figure 1**, which represents a market in the United States for a single product with demand curve **D** and domestic supply curve **S**. Because there is trade, domestic consumers are able to import. Currently, consumers pay P_w+t and consume quantity Q_{T0} , with quantity Q_{D0} produced domestically and quantity $Q_{T0} - Q_{D0}$ imported. The producer surplus is equal to area **A + B** in **Figure 1**, while the consumer surplus is equal to area **C**, the triangle bounded by the y-axis, demand curve **D**, and the price line P_w+t . The government's tariff revenue is equal to area **E**.

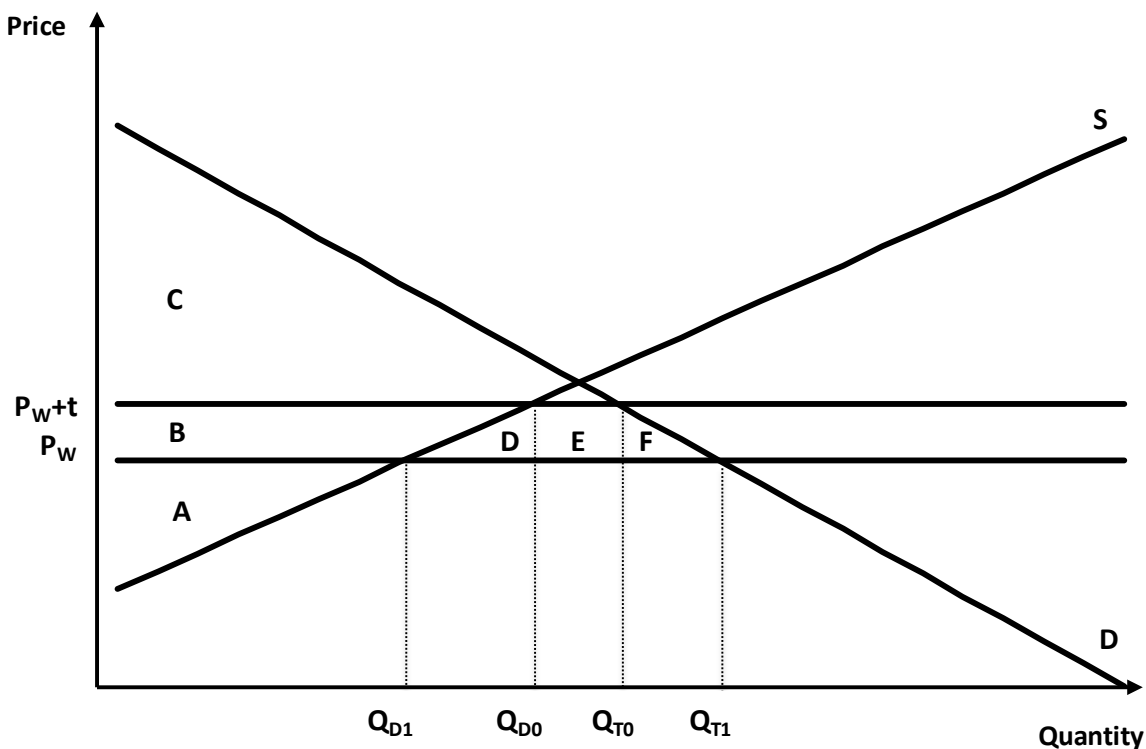
⁸ Products for which duties are suspended or reduced are counted as suspensions/reductions. Products for which existing duty suspensions or reductions are extended are counted as extensions.

⁹ The consumer surplus is the difference between what a consumer is willing to pay for a product minus what is actually paid, summed over all consumers of the product.

¹⁰ The producer surplus is the difference between the actual price received for a product and the lowest price at which a producer is willing to sell each individual unit, summed over all units sold.

¹¹ The strict comparative static approach does not consider the net tax effects of a tariff cut. On the other hand, the CBO treats the reduced tariff as an addition to U.S. income. The CBO assumes that the U.S. government will recover taxes equal to 25 percent of the revenue lost through a tariff reduction.

Figure 1. Eliminating a Duty on Imports in the Presence of Domestic Competition



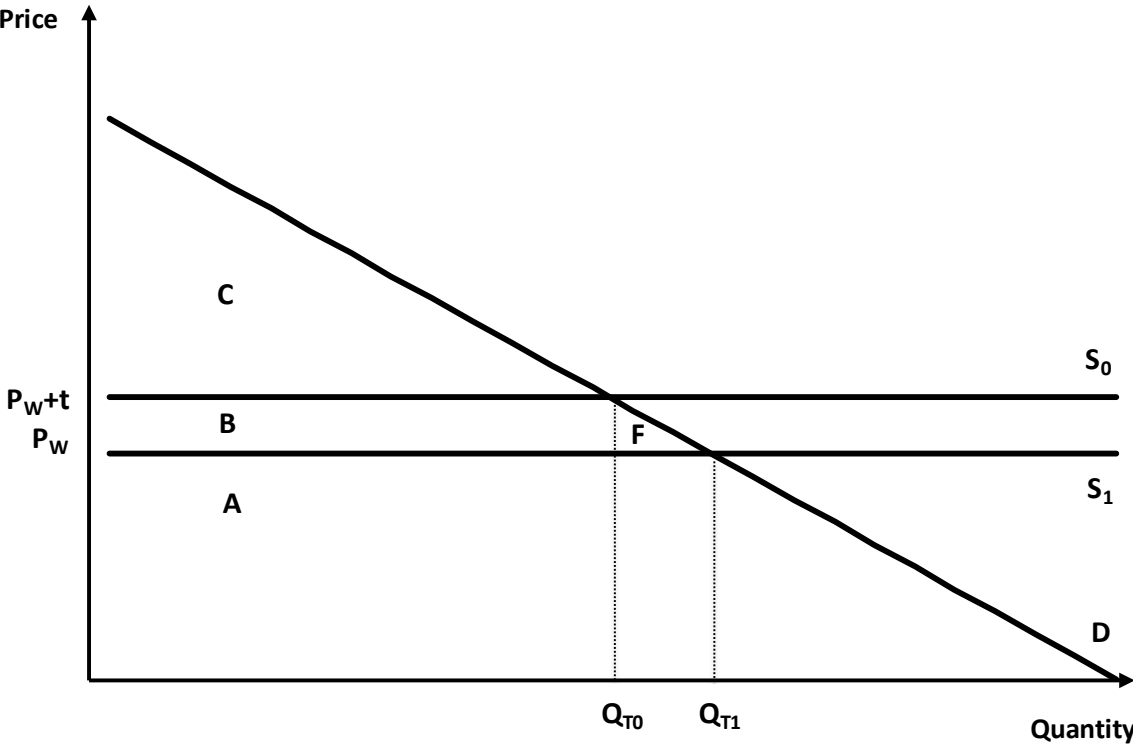
If tariff t is eliminated, the domestic price declines to P_w , and total consumption of the good rises to Q_{T1} . As a result, the consumer surplus rises from C to $B+C+D+E+F$. But this increase comes largely at the expense of producers and the government. Domestic producers receive a lower price, P_w , absent the tariff and sales volume declines from Q_{D0} to Q_{D1} . The producer surplus therefore shrinks from $A + B$ to only area A . The quantity of imports rises from $Q_{T0} - Q_{D0}$ to $Q_{T1} - Q_{D1}$ and the government no longer collects tariff E .

As is evident from **Figure 2** and the accompanying explanation, overall net welfare effect on the domestic economy is equal to the relatively small right triangles, D and F which reflect efficiency gains from consuming more of the product that would otherwise not have been consumed (i.e., area F) and from utilizing other resources let go by the domestic industry to engage in more efficient activities (i.e., area D). As a result of these offsetting gains and losses, it is generally acknowledged that in a large country with relatively low tariff rates, the gains from tariff reduction are not very large.¹² Moreover, the assumption that resources released by the domestic industry are reabsorbed seamlessly into other activities is, at best, optimistic. Any lag in the absorption of these resources (e.g., labor, purchased inputs, and the fair return on assets in the domestic industry) would tend to offset the net welfare gains represented by D and F .

¹² Krugman, P. (1995). Dutch Tulips and Emerging Markets: Another Bubble Bursts. *Foreign Affairs*, 74 (4), 28-44.

The situation is different for the tariff reductions associated with the MTB. **Figure 2** illustrates that while the change in consumer surplus is equally large in the absence of domestic production, the only lost surplus accrues to the government, which forfeits tax revenues of area **B** to consumers. There are no losses to domestic producers because there is no domestic production to lose. The net welfare gains to the domestic economy are captured by triangle **F**. There is no lost producer surplus or other losses to labor, producers of intermediate inputs, or returns on invested capital. Thus, the MTB acts like a sector-specific tax cut; they stimulate economic activity to consumers of the products enumerated in the MTB, without adverse consequence to producers.

Figure 2. Eliminating a Duty on Imports in the Absence of Domestic Competition



IV. Methodology

A. The GTAP model and data base

In this study, the economic effects of the MTB are estimated using the applied general equilibrium model and global data base developed and maintained by the Global Trade Analysis Project (“GTAP”). The GTAP model is a multiregional, multi-sector applied general equilibrium model that enables users to conduct quantitative analysis of international economic issues in an economy-wide framework.¹³ The

¹³ The modeling framework, data base, and select applications are provided in Tomas W. Hertel, ed., *Global Trade Analysis Modeling and Applications* (Cambridge University Press, 1997).

model applies a global data base of trade data characterizing linkages among regions and input-output data accounting for inter-sector linkages within regions. The current GTAP data base, version 7, covers the world in 2004 and contains 113 countries and regions, including the United States, and 57 industry sectors.¹⁴ The model is implemented using the GEMPACK software suite and can be run using the RunGTAP software program. The GTAPAgg package also enables users to create new regions and sectors from the existing regions and sectors in the data base.¹⁵

The first GTAP model and data base were developed in the mid-1990s, and they have been used by economists all over the world to examine the impact of proposed policy changes. GTAP has been used to assess the impacts of the Uruguay Round Trade Agreement, various regional free trade agreements, unilateral tariff reductions, enhancing productivity through imports and FDI, and improvements in national investment climates.¹⁶ Both the model and data base are fully documented.¹⁷

A general equilibrium model is a useful tool for analyzing the effects of economic policy changes on the overall economy, specific economic sectors, trade flows, and even the global economy. The model initially reflects a global economy in equilibrium – that is, prices are at levels that equalize supply and demand for goods, services, and factors of production. To implement a policy change, such as a tariff reduction or a subsidy, the model is “shocked” into a state of disequilibrium by changing one or more policy variables. Prices and quantities adjust to a new equilibrium, with different levels of exports, imports, production, employment, consumption, investment, and GDP. Because the model incorporates sector specific information, it is able to capture both upstream and downstream changes associated with a given policy change. **Figure 3** offers a simplified summary of how an MTB tariff reduction is flowed through the GTAP model.

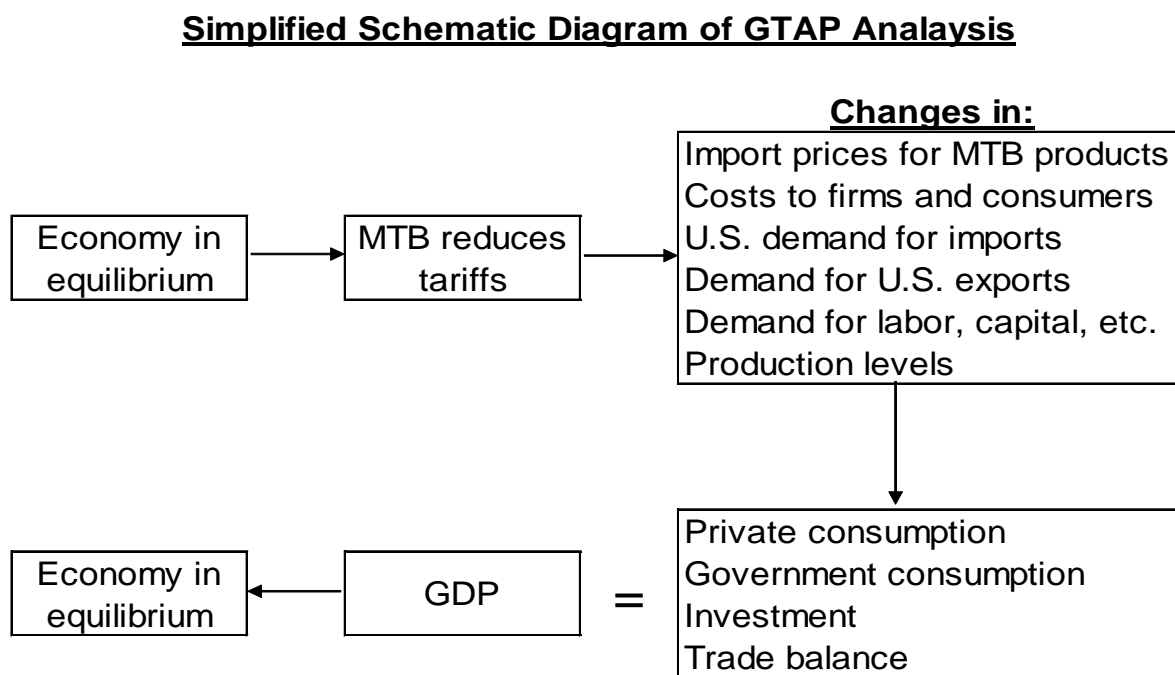
¹⁴ Badri Narayanan G. and Terrie L Walmsley, eds., *Global Trade, Assistance, and Production: The GTAP 7 Data Base* (Center for Global Trade Analysis, Department of Agricultural Economics, Purdue University, November 2008) at 2-3 to 2-7.

¹⁵ *Id.* at 1-4.

¹⁶ Many studies are available for download on the GTAP web site (<https://www.gtap.agecon.purdue.edu/>). The model, a restricted data base, and several utilities, including the *SplitCom* program utilized here, are also available from the web site.

¹⁷ See Hertel (1997); Narayanan G. and Walmsley (November 2007); and Betina V. Dimaranan, ed. *Global Trade, Assistance, and Production: The GTAP 6 Data Base* (Center for Global Trade Analysis, Purdue University, December 2006).

Figure 3. Simplified Schematic Diagram of GTAP Analysis



The GTAP model used for this study is not a dynamic model. However, it differs from partial equilibrium analysis by taking into account various economic linkages that are not considered, or simply assumed, in partial equilibrium analyses. The GTAP framework is also extremely flexible because it allows the modeler to adjust model assumptions to reflect circumstances in the real economy. For example, the default assumption in general equilibrium analysis is that economies are at full employment. In GTAP it is easy to modify this assumption and take into account slack labor market conditions that currently exist.

B. Calculation of inputs for the GTAP simulation

To estimate the effects of an MTB in GTAP, it is necessary to reduce import duties by an amount equivalent to the duties that would be suspended, or remain suspended, due to the bill. There is no existing estimate for the current MTB, as all the individual bills have not yet been tallied.

A review of available information indicates that the volume of imports and duty savings associated with the MTB process has been increasing. Some of the CBO's previous estimates of lost tariff revenue are available on its web site. According to the CBO cost estimate for H.R. 5385, *Miscellaneous Trade and Technical Corrections Act of 2002*, new duty suspensions and reductions affected more than 250 intermediate products. CBO estimated that the total cost to the government revenues of suspensions, reductions, and extensions to be \$150 million from 2003 to 2007.¹⁸ Because the CBO revenue estimates include a 25 percent offset to reflect effects on income and payroll tax receipts, the implied duty savings

¹⁸ See **Exhibit 4**. The cost of new suspensions and reductions was an estimated \$121 million, while the cost of extensions was an estimated \$29 million.

from H.R. 5385 of 2002 were \$200 million.¹⁹ This is roughly equivalent to the CBO's estimates for H.R. 1047, which became law in December 2004.

The CBO's cost estimate for H.R. 4944, *Miscellaneous Trade and Technical Corrections Act of 2006*, is also available on the CBO web site. The legislation suspended or reduced revenues on almost 400 products and temporarily extended more than 150 previously enacted suspensions and reductions.²⁰ The CBO estimated government revenue would be reduced by \$278 million by these measures, which implies duty savings of \$371 million during 2006 to 2010.²¹ Many of the tariff provisions from H.R. 4944 were ultimately incorporated into H.R. 4, the Pension Protection Act of 2006.²² The CBO's score for this tranche of duty reductions was not specified. The CBO did break out the revenue effects of the duty suspensions enacted by H.R. 6111, and estimated that revenue would be reduced by \$217 million from 2007 to 2010. These estimates imply net duty savings of \$290 million.

In sum, the 2006 MTB related bills passed into law were estimated to generate approximately \$660 million in tariff savings, compared to \$200 million in tariff savings estimated for the 2004 legislation, an increase of 230 percent.

Trends in the number of products included in recent MTBs also suggest an increasing trend. As shown in Figure 1 above, the estimated number of products experiencing duty suspensions, reductions, or extensions of suspensions or reductions, grew from 419 in the 106th Congress, to 443 in the 108th Congress, and to 800 in the 109th Congress. That is, the number of products in the MTBs of the 109th Congress exceeded those in prior MTBs by 80 to 90 percent.

Finally, trends in the number of bill reports issued by the USITC also point to a large increase in MTB-related activity. According to its web site, the USITC issued 367 bill reports during the 106th Congress, and 104 reports for each the 107th and 108th Congresses.²³ During the 109th Congress, the USITC issued 659 memoranda for House bills and 391 memoranda for Senate bills. The 110th Congress did not pass a miscellaneous tariff bill,²⁴ but the USITC issued 772 reports on bills that had been sponsored by the House alone. The web site of the House Committee on Ways and Means indicates that it received 818 bills for inclusion in the next MTB.²⁵ The Senate of the 110th Congress did not even issue any bills for inclusion in the MTB. But even if the Senate issued the same number of bills it did during the 109th Congress, the total number of bill reports would have been in excess of 1,200 for the 110th Congress.²⁶ This would represent more than a 1,000 percent increase from the number of bill reports issued by the

¹⁹ $150,000,000/(1-0.25) = 200,000,000$.

²⁰ See **Exhibit 5**.

²¹ $278,000,000/(1-0.25) = 370,666,667$.

²² The Miscellaneous Trade and Technical Corrections Act of 2006 appears under Title XIV of H.R. 4.

²³ Bill reports issued by the USITC for the 105th through 110th Congresses are available at http://www.usitc.gov/tata/hts/other/rel_doc/bill_reports/index.htm.

²⁴ Individual bills introduced during the 110th Congress are still under consideration by the 111th Congress and can be included in the next MTB.

²⁵ As of May 2009, the list was accessible from <http://waysandmeans.house.gov/MoreInfo.asp?section=41>.

²⁶ $818+391=1,209$.

USITC during the 107th and 108th Congresses, and a 230 percent increase from the reports issued during the 106th Congress.

Given this range of outcomes, and the fact that there is pent up demand for inclusion in the next MTB, it is reasonable to expect that the number of products affected by any MTB legislation during the 111th Congress could be 1,600 – double the 800 products affected by the legislation passed during the 109th Congress. Nevertheless, the approach here is to assume a product count of 1,480, based on the 80 to 90 percent increase in the number of products in the 109th Congress relative to earlier bills.

Several factors likely drive the expansion of MTB bills over time. The overall growth of the U.S. economy creates an upward trend in MTB candidates. Constant change in the U.S. economy means new products are continually introduced as others are discontinued -- both of which potentially create new MTB possibilities. Beyond that, globalization – the trend for increased worldwide commerce and competition – is likely a major driver. U.S. manufacturing operations face increasing international competition and are under pressure to decrease costs through a number of means, including decreasing input costs through reduced tariff bills.

Companies engaged in international trade and commerce are also keenly aware of identifying options to reduce costs/increase competitiveness by working with host governments on measures like tariff suspensions. Other developed countries also offer mechanisms to suspend tariffs. The European Union, for example, does so through an administrative review rather than legislation. Awareness of the U.S. MTB process also has likely increased over time.²⁷

The next step is to estimate the value of imports and duties to be affected by the next MTB. Due to the sheer number of bills and memoranda, a sampling methodology was used to estimate the value of imports and collected duties that would be affected by the bills. Thirty bills from the 110th Congress were randomly selected using the Microsoft Excel random function. Based on this sample, it was determined that a sample size of 193 bills would be needed to obtain the desired estimation precision. Microsoft Excel's random function was used to select 193 observations from the 772 House bills from the USITC's web site.

A data base containing import values, estimated loss in tariff revenues, tariff rate, HTS number, and type of action requested (suspension, reduction, extension, or clarification) were collected from the sample bills. These data were used to calculate the average import level per bill and the average tariff savings per bill. In addition, the products were allocated based on whether the purchaser was likely to be a company using the product as an intermediate input, a household, or the investment sector.

Overall imports affected by the bill were estimated as the product of average import value per bill and 1,480 bills. The overall tariff savings were estimated by multiplying the average tariff savings per bill by the 1,480 bills. The average value of imports of the bills in the sample is \$25.9 million per bill, while the

²⁷ A precise prediction of the exact number of tariff suspensions likely to be included in new MTB legislation is not possible. In general, if fewer qualifying tariff suspensions are included the economic benefits will decrease and if more are included the economic benefits will increase in rough proportion.

average duty estimate per bill in the sample is \$1 million. This implies tariff savings of \$1.5 billion on imports of \$38.2 billion. This information was used in a GTAP simulation to estimate the potential impact of the upcoming MTB on the U.S. economy.

The estimated duty level calculated from the sample of 193 bills is higher than the CBO's cost estimates for the 2002 and 2006 MTBs described above.²⁸ The precision of these estimates, however, is less important than the relationship between the duty savings and the resulting GDP and employment growth. Multipliers translating the duty reductions into real economic growth and employment effects will be calculated from the simulation results below. These multipliers can be applied to the estimated duty estimated by the USITC and CBO when the final MTB legislation is prepared to derive more up-to-date growth and employment effects.

C. Preparation of the GTAP data base

Several steps were undertaken to prepare the GTAP data base and model to simulate the effect of the MTB. First, the raw data for regions, commodity sectors, and factors of production were aggregated using the GTAP FlexAgg program. The geographic entities in the data base were aggregated into two regions, the United States and Rest-of-World ("ROW"). The 57 sectors were aggregated into four sectors: agriculture, extraction/utilities, manufacturing, and services. The five factors of production were aggregated into four factors: land, labor, natural resources, and capital.

Second, an additional sector was "split" from the manufacturing sector. This step is necessary because there is significant U.S. domestic production and imports in all GTAP tradable goods sectors. A reduction in the import duty consistent with the MTB's tariff savings would therefore have adverse effects on competing U.S. producers, which is inconsistent with the fact that there are few, if any, competing producers of MTB-specified products in the United States. To make the data base consistent with the MTB, the existing manufacturing sector was split into two sectors: manufacturing with domestic production (MFGDP) and manufacturing without domestic production (MFGNDP). The latter sector imports an amount equal to estimated MTB imports plus the duties on those imports. Those imports were allocated across users based on their classification as intermediate inputs by firms or as final demand by the household or investment sectors, depending on their classification in the MTB data base described above.

D. Preparation of the GTAP model

Prior to running a simulation, it is customary to specify model closure and the solution method.²⁹ Model closure reflects the choice of predetermined and endogenous variables. The standard macroeconomic closure was used for this simulation, with two exceptions: government spending was fixed so that it

²⁸ Obviously, this average estimated by the USITC in these bill reports exceeds that suggested by the \$500,000 limit on tariff revenue reductions. This disparity is likely due to a number of factors. In some cases, the available data categories – basket HTS categories – included products not actually included in the duty suspension legislation. In other instances, the Congress may narrow, divide, or otherwise adjust the duty suspensions/reductions in the final legislation to meet the threshold. It is also likely that in many instances, future import levels in excess of historical levels used for the USITC estimates would magnify the tariff impact and the potential economic benefits.

²⁹ Readers with a greater interest in the aggregation scheme and model preparation are encouraged to review **Exhibit 6**.

would not be affected by the reduced tariff revenues;³⁰ and the closure was changed to allow employment levels to vary, depending on whether the simulation increased or reduced demand for labor. This latter modification makes sense given the currently high unemployment rate in the United States. GTAP offers a variety of different solution methods with varying complexity and computation time. The Gragg multi-step procedure with automatic accuracy, the preferred method for serious policy simulation, is used here.

The elasticity of substitution between imports and domestic production in the import-only sector was changed from 3.2894 to zero, to reinforce the special nature of the import-only sector.

E. Preparation of the GTAP shock

The typical MTB bill is a combination of tariff suspensions, reductions, extensions of existing suspensions or reductions, and clarifications of existing duty rates. Absent the MTB, duties for the products at issue would be equal to the most favored nation rates, instead of the rates resulting from the MTB process. Thus, in order to estimate the impact of the MTB, duties on MTB imports are reduced by an amount equal to the total estimated tariff savings associated with the bill, whether from suspensions, reductions, extensions, or clarifications. The variable shocked was *tms*("MFGNDP", "RestofWorld", "USA") and the magnitude of the shock was -3.8083.³¹

V. Characteristics of the MTB sample

This section describes the random sample of USITC bill reports reviewed for this study. The total value of imports in the sample is \$5 billion, and the estimated duties amount to \$197 million. The majority of bills examined, 107 out of the 193 observations, are for extensions, while 81 are requests for new suspensions. The remaining observations are renewals (2 obs.), duty reductions (2 obs.), or clarifications (1 obs.).

Table 2 below shows the industry breakdown of the sample based on the GTAP industry nomenclature. The value of chemical industry, metals industry, and machinery and equipment industries combined account for about 90 percent of the total sample import value. The chemical industry also accounted for 137 out of the 193 MTB requests in the sample.

³⁰ This is a common technique which prevents changes in government spending resulting from a tariff reduction or increase. In this case, the variable *yg*("USA") was swapped with *dpsave*("USA"). This closure enforces a stable relationship between consumption and savings. An alternative closure, swapping *yg*("USA") with *dpgov*("USA"), allows income to vary with savings, and results in significantly larger economic effects.

³¹ The shock represents the percent power shock necessary to reduce the existing weighted average *ad valorem* tariff rate from 3.959 percent to zero.

Table 2. Import Value by Industry in the Sample of MTB Bill Reports

| GTAP Industry | Value of imports |
|------------------------------------|------------------|
| | \$ million |
| Chemical, rubber, plastic products | 1,576.6 |
| Metal products | 1,468.3 |
| Machinery and equipment nec | 1,446.5 |
| Electronic equipment | 227.7 |
| Textiles | 94.4 |
| Motor vehicles and parts | 71.6 |
| Food products nec | 45.0 |
| Wearing apparel | 21.9 |
| Mineral products nec | 12.0 |
| Transport equipment nec | 8.1 |
| Wood products | 4.1 |
| Leather products | 2.8 |
| Wool, silk-worm cocoons | 2.5 |

The products were also categorized based on whether they were likely to be consumed as final demand by households or for investment purposes, or whether they are likely to be consumed by other firms as an intermediate manufacturing input. The vast majority of imports products in the sample, 93 percent, are used as intermediate inputs in the production process. Six percent are consumed by households, while the remainder is consumed by the investment sector.

The duties in the bill reports were also reviewed to determine whether or not the annual duties lost for each bill exceed \$500,000, which is the threshold established by the Congress. Of the 193 bills in the sample, 87 percent have duty losses less than \$500,000 in the first year. For bills exceeding the threshold, the Ways and Means Committee can limit the scope of the request or convert the bill into a request for duty reduction, rather than duty suspension.

The simple average reduction in the tariff rates among the sample products is 5.28 percent *ad valorem* and the standard deviation is two percent. The weighted average duty rate is four percent. The median duty reduction in the sample is six percent. Seventy-five percent of the bills incorporated duty reductions less than 6.5 percent *ad valorem*.

Thus, the typical product receiving MTB treatment is a manufactured input, frequently a chemical, which is used as an input in the production process. The price of these inputs to U.S. producers is approximately six percent higher due to the presence of duties. The MTB reduces or eliminates these duties, enabling U.S. producers to purchase these inputs at a savings. The impact of these savings on the broader economy is discussed in the following section.

VI. Simulation results

A. Prices

As noted above, the reduction or elimination of tariffs reduce import prices. These lower import prices benefit consumers by saving them money on each unit they buy, and also by increasing the volumes that are ultimately purchased. If the purchased products are intermediate inputs to production in other industries, production costs in those industries fall in absolute terms and relative to imports. One would expect, then, that the MTB would reduce import prices in the hypothetical import-only sector, reduce output prices in sectors that consume MTB imports as inputs, and reduce overall U.S. price levels.

These expectations are fulfilled, as shown in **Table 3**. The price of MTB imports declines by 3.814 percent due to the MTB. The price levels of manufactured goods, U.S. manufactured exports, and total U.S. output also decline in the new equilibrium with the MTB, albeit by modest amounts.

Table 3. Selected Price Changes Resulting from the MTB

| Change in the price of: | Percent Change |
|--------------------------------|-----------------------|
| MTB imports | - 3.814% |
| Manufactured goods | - 0.033% |
| U.S. manufactured exports | - 0.022% |
| Total US output | - 0.005% |

B. Domestic sales and trade

These competitive impacts are illustrated by the model results for domestic sales, exports, and imports shown in **Table 4**. Lower prices not only increase demand, but also enable U.S. producers to capture market share from imports. Thus, domestic sales of manufacturers rise by \$3.3 billion, while imports of manufacturers shrink by \$154.4 million. U.S. manufacturers become more competitive in overseas markets, leading real exports to expand by \$1.3 billion.

Table 4. Estimated Changes in Domestic Sales and Trade due to the MTB

| Change in the value of: | \$ millions |
|--------------------------------|--------------------|
| Domestic Sales | + 3,291.7 |
| Real Exports | + 1,288.8 |
| Real Imports | - 154.4 |

C. Domestic output

The lower tariffs resulting from the MTB process lead to higher real output not only in manufacturing, but also the other four sectors. As shown in **Table 5**, manufacturing experiences the largest increase in

output, at \$4.6 billion. Output in services industries also expands by \$2.7 billion. The increases in output of the agriculture and extraction/utility sectors are relatively modest but not insignificant.

Table 5. Estimated Changes in Real Commodity Output due to the MTB

| Industry | \$ millions |
|----------------------|--------------------|
| Agriculture | 48.0 |
| Extraction/utilities | 149.7 |
| Manufacturing | 4,576.7 |
| Services | 2,696.0 |
| Total | 7,470.4 |

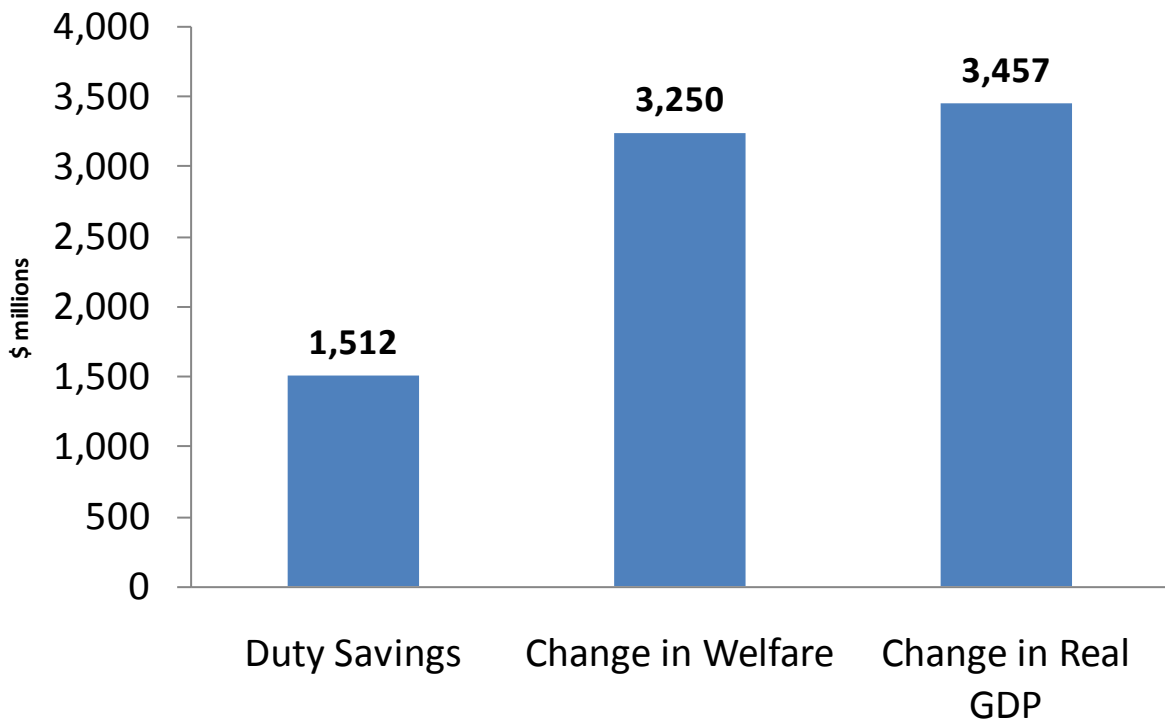
D. GDP and economic welfare

The two broadest measures of the MTB’s impact on the economy are illustrated by the changes in real gross domestic product (GDP) and economic welfare. The change in GDP measures the net change in total economic output of domestic resources, while economic welfare reflects the net value to producers and consumers of the trade policy change. Whereas the partial equilibrium analysis of welfare focused on changes in producer and consumer surplus, national welfare in the general equilibrium context is measured as the equivalent variation. The equivalent variation is the change in aggregate per capita utility resulting from a simulation. The change in welfare is attributed to the interactions between taxes (both pre-existing and newly introduced) and quantity changes, and effects of changes in the terms of trade, the relative prices of savings and investment, endowments (*e.g.*, employment levels), and/or technology.³²

The implementation of the MTB duty reductions results in positive gains to GDP and national welfare. Real GDP rises by approximately \$3.5 billion. This increase represents a 2.3 multiplier from the \$1.5 billion MTB tariff reduction. Economic welfare increases by \$3.3 billion. About 37 percent of the welfare gain can be attributed to the improved allocation of resources in the aftermath of the MTB reductions, while the remainder is primarily due to labor effects.

³² Karen M. Huff and Thomas W. Hertel, *Decomposing Welfare Changes in the GTAP Model* GTAP Technical Paper No. 5 (January, 2000).

Figure 4. Estimated Changes in Economic Welfare and Real GDP



E. Employment

If employment levels in an economy cannot be changed, the duty reductions would have limited effects on the supply of U.S. labor. If the U.S. economy is at full employment, any increase in demand for labor would result in higher average wage levels. However, it is clear that the United States is not at full employment. The unemployment rate has increased from 4.7 percent in November 2007 to 8.9 percent in April 2009. Moreover, a broader measure of unemployment incorporating individuals who have left the labor force and workers underemployed for economic reasons, has risen from 8.4 percent in November 2007 to 15.8 percent in April 2009.³³ Thus, the GTAP model has been set up to increase employment levels rather than wages in reaction to the tariff reduction.

The employment effects of the MTB are relatively large. According to the simulation data base, demand for labor increases approximately \$2.8 billion as a result of the MTB. **Figure 5** indicates that nearly \$1.1 billion dollars of labor demand occurs in goods-producing industries, while \$1.7 billion of labor demand arises from services industries.

³³ Bureau of Labor Statistics, *Employment Situation: April 2009* USDL 09-0482 (May 9, 2009) at Table A-12. This unemployment rate includes unemployed workers, plus all marginally attached workers, plus those employed part time for economic reasons, as a percent of all civilian labor force plus all marginally attached workers.

Figure 5. Increase in Labor Demand in Goods-Producing and Service-Producing Industries



Data from the Bureau of Labor Statistics indicate that average annual private earnings in the United States during 2008 were \$31,615 for the average workweek of 33.6 hours.³⁴ Based on these data, the employment supported by the MTB is equivalent to 89,671 jobs.

³⁴ See Exhibit 7. The BLS reports total private sector average weekly earnings of \$607.99. Multiplying this weekly average by 52 weeks yields average earnings of \$31,615.

Exhibits

**Exhibit 1. House Ways and Means, Subcommittee on Trade:
Introduction of Miscellaneous Tariff and Duty Suspension
Bills by December 14, 2007**

ADVISORY

FROM THE COMMITTEE ON WAYS AND MEANS

SUBCOMMITTEE ON TRADE

FOR IMMEDIATE RELEASE
November 01, 2007
TR-7

CONTACT: (202) 225-6649

Introduction of Miscellaneous Tariff and Duty Suspension Bills by December 14, 2007

Chairman Sander M. Levin (D-MI) and Ranking Member Wally Herger (R-CA) of the Subcommittee on Trade today jointly announced that the Subcommittee is requesting that all Members who plan to introduce tariff legislation or miscellaneous corrections to the trade laws do so by Friday, December 14, 2007, in order that they be included in the forthcoming opportunity for public comment on these bills.

BACKGROUND:

The Committee on Ways and Means has jurisdiction over legislation to amend the U.S. tariff schedule and to make corrections to trade legislation. The primary purpose of the bill is to help U.S. manufacturers compete at home and abroad by temporarily suspending or reducing duties on intermediate products or materials that are not made domestically, or where there is no domestic opposition. Such reductions or suspensions reduce the costs for U.S. businesses and ultimately increase the competitiveness of their products. The process will look carefully for domestic production and opposition to proposed modifications to the U.S. Harmonized Tariff Schedule.

To ensure that the Subcommittee on Trade has sufficient time to evaluate and consider these bills, the Subcommittee has followed a customary process beginning with a request that all Members who plan to introduce tariff legislation or miscellaneous corrections to the trade laws do so by a specific date, which in this case is Friday, December 14, 2007.

After collecting and reviewing bills introduced by this deadline, the Subcommittee will issue an advisory requesting public comment on the bills the Subcommittee identifies to assist it in marking up the legislation. In addition, the Subcommittee will request a review and analysis of each bill from the U.S. Trade Representative, the U.S. International Trade Commission, the Department of Commerce, and U.S. Customs and Border Protection.

It is possible that bills that create excess revenue losses, operate retroactively, or attract significant controversy or opposition will not be included in a comprehensive bill incorporating these measures.


NEW DISCLOSURE REQUIREMENT:

Members are advised that the Rules of the House of Representatives of the 110th Congress require that Members provide a written disclosure statement to the Ways and Means Committee Chairman and Ranking Member for any bill that contains a limited tariff benefit, which is defined as a provision modifying the Harmonized Tariff Schedule of the United States in a manner that benefits 10 or fewer entities. See Rules XXI and XXIII. The Committee is required to maintain these written disclosures and make them open for public inspection for limited tariff benefits that are included in any measure reported by the Committee, a

measure voted on without Committee consideration but referred to the Committee, or any conference report filed by the Committee or any subcommittee thereof.

For specific instructions and guidance regarding bill submission, including compliance with the limited tariff benefit disclosure requirement, please see the process sheet entitled Miscellaneous Tariff Bill (MTB) Process [located here](#).

Click here to view and print the [Standard Disclosure Cover Letter](#) and [Limited Tariff Disclosure Form](#)

 The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202-225-1721 or 202-226-3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.

**Exhibit 2. United States Senate Committee on Finance:
Grassley, Baucus Solicit Input for Miscellaneous Tariff Bill**

United States Senate Committee on Finance

For Immediate Release

Tuesday, April 25, 2006

Grassley, Baucus Solicit Input for Miscellaneous Tariff Bill

WASHINGTON – Sen. Chuck Grassley, chairman of the Committee on Finance, and Sen. Max Baucus, ranking member, have invited senators to submit items for possible inclusion in a miscellaneous tariff bill. In a “Dear Colleague” letter, the senators emphasized that items to be considered must, in accordance with the long-running practice, meet specific criteria. Namely, they must be non-controversial and must amount to less than \$500,000 in annual lost revenue. The last miscellaneous tariff bill took two Congresses to complete because some senators departed from the usual criteria.

The text of the Grassley-Baucus “Dear Colleague” letter follows.

April 21, 2006

Miscellaneous Tariff Bill Deadline to Introduce Bills – May 26, 2006

Dear Colleague:

The Senate Finance Committee is initiating the process of compiling a Miscellaneous Tariff Bill (MTB). Senators who are interested in introducing bills for potential inclusion in the MTB should do so by May 26, 2006.

The MTB is comprised of numerous non-controversial tariff bills introduced by various Senators. The MTB will provide an opportunity to temporarily eliminate or reduce duties on narrowly defined products that are imported into the United States and to liquidate or reliquidate certain duty entries that were incorrectly classified by the Bureau of Customs and Border Protection (CBP). Duty suspension bills, which account for the majority of the provisions that are included in the MTB, reduce input costs for U.S. businesses and thus ultimately increase the competitiveness of their products.

Since the early 1980s, the Finance Committee has sought to report an MTB each Congress. Unfortunately, the last MTB – which was signed into law in 2004 – took two Congresses to complete. This was because the regular order for assembling the bill broke down. Namely, some Senators insisted on the inclusion of provisions in the MTB even though those provisions did not meet each of the criteria for including a bill in the MTB.

We will be very clear. With this announcement of the initiation of the MTB process, we are also announcing a return to regular order. We are pledging to work together to resist any efforts to include provisions in the MTB that do not meet the following criteria.

First and foremost, in order to be included in the MTB, a bill must be non-controversial. A bill will be controversial if it is objected to by a domestic producer of the product for which the duty reduction is being sought. Because the MTB is passed by unanimous consent, its provisions must be non-controversial. Secondly, the cost for each bill must amount to less than \$500,000 of lost revenue per year.

All provisions in the MTB must have been introduced as stand-alone bills by May 26 and should include the following information: (1) a precise description of the imported product (chemical products should be described by their chemical name – not their trade name – and should have a Chemical Abstracts Service (CAS) registry number in the description); and (2) the correct 8-digit Harmonized Tariff Schedule (HTS) number. Liquidation and reliquidation bills must include the date of entry and the 11-digit entry number. This information can be very technical. Members should contact the International Trade Commission (ITC) or CBP prior to introduction to make sure that the bill text is technically correct.

During the MTB process, we anticipate that the Senate Legislative Counsel will be busy working on numerous tariff bills. The House passed an MTB – H.R. 4944 – on March 15, and in order to reduce the workload of the Legislative Counsel, if the bill you are seeking to introduce is included in the House MTB – or has companion legislation introduced in the House of Representative yet was not included in the House MTB – please reference the corresponding bill section number or the H.R. number, respectively, when contacting the Senate Legislative Counsel.

Soon after the deadline for introduction (May 26), the Finance Committee will issue a press release seeking public comments on provisions for which inclusion in the MTB is being sought. Simultaneously, the ITC will review the product description and tariff classification in each of the bills and solicit comments from industry on the bills. The ITC will also report on any domestic opposition to a bill and will provide a duty loss estimate for each bill. The ITC's duty loss estimates will be used by the Congressional Budget Office to score each bill. Information obtained by the Finance Committee and the ITC through this process will be taken into consideration when assembling a final MTB package.

If you have questions on the MTB process, please contact {staff name deleted} or {staff name deleted}. Thank you in advance for your cooperation in helping to develop this legislation.

Sincerely,

Charles E. Grassley
Chairman

Max Baucus
Ranking Member

**Exhibit 3. International Trade Administration, Industry
Trade Policy, Miscellaneous Tariff Bills**


[Print](#)


Industry Trade Policy

[Trade Policy HomePage](#)

[Trade Agreements](#)

[Free Trade Agreements](#)

[WTO](#)

[Trade Disputes and U.S. Trade Law Enforcement](#)

[Retaliatory Actions](#)

[Section 301](#)

[Special 301](#)

[Section 337](#)

[Safeguards](#)

[Implementation of U.S. Trade Law](#)

[U.S. Preference Programs](#)

[Miscellaneous Tariff Bills](#)

Miscellaneous Tariff Bills

Traditionally, miscellaneous tariffs bills (MTBs) are introduced each session of Congress. These bill usually request certain imports into the United States be given duty-free or reduced duty status, or request other technical corrections to the U.S. Harmonized Tariff System (USHTS). MTBs tend to be non-controversial and in the past after leaving the House pass the Senate by unanimous consent.

The Committee on Ways and Means in the House of Representatives has jurisdiction over legislation to amend the U.S. tariff schedule and to make corrections to trade legislation. To ensure that the Subcommittee on Trade has sufficient time to evaluate and consider MTBs, the Subcommittee has followed a customary process beginning with a request that all Members who plan to introduce tariff legislation or miscellaneous corrections to the trade laws do so by a date early in the newest session of Congress.

After collecting and reviewing bills introduced by this deadline, the Subcommittee will issue an advisory requesting public comment on the bills it identifies to assist it in marking up the legislation. In addition, the Subcommittee will request a review and analysis of each bill from the U.S. Trade Representative, the International Trade Commission (ITC also seeks public comment through the federal register), and Customs and Border Patrol. The Department of Commerce also reviews potential duty suspension bills and is generally provided an opportunity to brief staff on the Departments' positions.

MAS analysts review each bill related to products and other technical issues related to U.S. industry. MAS's Office of Trade Policy Analysis coordinates and reviews the analysis and along with the Department's Office of Assistant General Counsel and Office of Legislative and Intergovernmental Affairs, passes on the Department's recommendations to OMB and other participating agencies, and ultimately on to Congress.

Once the House passes a final package of MTBs, it enters the Senate and is referred to the Finance Committee. Assuming the bill passes the Senate and any differences are worked out between both chambers, the bill then goes to the President for signature.

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**Exhibit 4. Congressional Budget Office Cost Estimate: H.R.
5385, Miscellaneous Trade and Technical Corrections Act of
2002**



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

October 2, 2002

H.R. 5385 **Miscellaneous Trade and Technical Corrections Act of 2002**

As ordered reported by the House Committee on Ways and Means on September 18, 2002

SUMMARY

H.R. 5385, the Miscellaneous Trade and Tariff Act of 2002, is an omnibus trade bill that would reduce receipts through various changes to existing trade law, including the suspension or reduction of duties on specific products, the refund of already settled duties paid on certain entries (reliquidation), and the refund of duties paid on certain imported merchandise upon destruction or exportation (drawback). In addition, H.R. 5385 would authorize the President of the United States to extend normal trade relations (NTR) to Yugoslavia and permit the designation of qualified industrial zones (QIZs) in Turkey. The Congressional Budget Office (CBO) estimates that H.R. 5385 would decrease governmental receipts by \$82 million in 2003, by \$272 million over the 2003-2007 period, and by \$397 million over the 2003-2012 period.

By requiring that certain wine importers certify to the Bureau of Alcohol, Tobacco and Firearms (ATF) that their imports meet U.S. standards for wine-making, H.R. 5385 would impose a private-sector mandate as defined in the Unfunded Mandates Reform Act (UMRA). Based on information from the ATF and industry sources, CBO expects that costs imposed on wine importers resulting from the mandate would fall well below the annual threshold established in UMRA (\$115 million in 2002 for private-sector mandates, adjusted annually for inflation).

H.R. 5385 contains no intergovernmental mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The following table summarizes the estimated budgetary impact of H.R. 5385.

| | By Fiscal Year, In Millions of Dollars | | | | | | | | | |
|------------------------------------------|----------------------------------------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|
| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| CHANGES IN REVENUES | | | | | | | | | | |
| Estimated Revenues | | | | | | | | | | |
| Title I: Tariff Provisions | | | | | | | | | | |
| Subsection A | | | | | | | | | | |
| New duty suspensions and reductions | -34 | -34 | -31 | -15 | -7 | -1 | * | * | * | * |
| Extensions of suspensions and reductions | <u>-8</u> | <u>-8</u> | <u>-8</u> | <u>-4</u> | <u>-1</u> | <u>0</u> | <u>*</u> | <u>*</u> | <u>*</u> | <u>*</u> |
| Subtotal | -41 | -43 | -39 | -18 | -8 | -2 | * | * | * | * |
| Subsection B | | | | | | | | | | |
| Duty-free treatment for handmade rugs | -6 | -5 | -6 | -7 | -2 | 0 | 0 | 0 | 0 | 0 |
| Unused merchandise drawback | -31 | -8 | -8 | -8 | -8 | -9 | -9 | -9 | -9 | -9 |
| Other provisions | <u>-2</u> | <u>-1</u> | <u>-1</u> | <u>-1</u> | <u>-1</u> | <u>*</u> | <u>*</u> | <u>*</u> | <u>*</u> | <u>*</u> |
| Subtotal | -40 | -15 | -15 | -17 | -11 | -9 | -9 | -10 | -10 | -10 |
| Title II: Other Trade Provisions | | | | | | | | | | |
| NTR for Yugoslavia | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| Turkey QIZ | 0 | 0 | -2 | -7 | -12 | -13 | -13 | -14 | -14 | -15 |
| Total Changes in Revenue | -82 | -58 | -57 | -43 | -32 | -25 | -24 | -25 | -25 | -26 |

NOTES: * = Less than \$500,000.

Components may not sum to total due to rounding.

SOURCE: Congressional Budget Office.

Revenues

Title I of the bill would reduce or suspend the duties on various products imported into the United States, and provide additional tariff relief through reliquidation and drawback. Duties on over 250 intermediary products would be suspended or reduced by subsection A. These products include certain chemical compounds, machinery, tools, and toys. The bill would temporarily extend some duty suspensions and reductions that existed in prior law that are set to expire. Most of the extensions would be through December 31, 2006. Based on information from the U.S. International Trade Commission (ITC), CBO estimates that these extensions would reduce revenues by \$29 million between the years 2003 and 2007. In

addition, subsection A would suspend or reduce the duties on numerous other products. CBO estimates that these provisions would decrease revenues by \$121 million over the 2003-2007 period. (Most of the suspensions and reductions would be effective through December 31, 2006.) In total, CBO estimates subsection A would reduce governmental receipts by \$41 million in 2003 and by \$150 million over fiscal years 2003 through 2007, net of income and payroll tax offsets.

Subsection B of Title I would liquidate or reliquidate certain entries of goods imported into the United States, effectively providing refunds of duties paid on previously imported products. CBO estimates these provisions would reduce governmental receipts by about \$1 million in fiscal year 2003. Subsection B also contains several miscellaneous trade provisions that would have a more significant impact on revenues. Section 1606, which would extend duty-free treatment under the Generalized System of Preferences to certain hand-knotted or hand-woven carpets, would reduce receipts by an estimated \$27 million over the 2003-2007 period, net of income and payroll tax offsets. Section 1607, which would allow for retroactive duty drawback of unused merchandise under section 1313(j) of the Tariff Act of 1930, would reduce revenues by an estimated \$31 million in 2003 and \$63 million over the 2003-2007 period, net of income and payroll tax offsets. In total, CBO estimates that the provisions contained in subsection B would reduce governmental receipts by about \$98 million over the 2003-2007 period, net of income and payroll tax offsets.

Title II of H.R. 5385 would authorize the President of the United States to extend normal trade relations to Yugoslavia and permit the U.S. Trade Representative (USTR) to designate certain zones in Turkey as qualified industrial zones. U.S. imports from these zones would receive duty-free treatment so long as production of the goods included a significant amount of value added in such zones in Israel. CBO assumes that if given the authority, the President would extend NTR status to Yugoslavia and estimates that doing so would decrease revenues by about \$5 million over the 2003-2007 period, net of income and payroll tax offsets. CBO estimates that expanding the QIZ initiative to include Turkey-Israel QIZs would have a negligible effect on governmental receipts in 2003 but would reduce collections by \$20 million over the 2003-2007 period and by \$89 million over the 2003-2012 period, net of income and payroll tax offsets. Title II also would require that certain importers of wine certify that their imports meet U.S. wine-making standards. Based on information from the Joint Committee on Taxation (JCT), CBO estimates that any effect on revenues would be negligible.

BASIS OF ESTIMATE

For the purposes of this estimate, CBO assumes that H.R. 5385 will be enacted early in fiscal year 2003. Estimates of the revenue impact of suspending or reducing duty rates are based on data from the ITC. Estimates of the duty drawback provision are based on data from the U.S. Customs Service on drawback collections and CBO's projections for future customs collections. The estimates of the impact of granting Yugoslavia normal trade relations are based on current import data and CBO's projection of non-petroleum imports. Estimates pertaining to Turkey-Israel QIZs are based on information from the Office of the USTR and the ITC on the impact of Jordan-Israel QIZs on Jordanian production and U.S. governmental receipts. JCT provided information regarding the provision on proper certification of certain imported wine. The remaining revenue provisions in H.R. 5385 are based on estimates provided by the ITC and the U.S. Customs Service, on recent data on the collections of customs duties, and on information from various industry sources. Consistent with standard procedures for estimating the revenue impact of indirect business taxes, the gross revenue impact on customs duties is reduced by 25% to reflect offsetting effects on income and payroll tax receipts.

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

H.R. 5385 contains no intergovernmental mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

Beginning on January 1, 2004, section 2003 of H.R. 5385 would require that certain wine importers certify to the ATF that the wine they import meets U.S. standards for wine-making. Such a requirement would constitute a private-sector mandate as defined by UMRA. Certification would not be required for wine imported from countries that have signed an international agreement or treaty recognizing U.S. wine-making standards. According to the ATF, several wine-exporting countries have signed such an agreement and are scheduled to ratify the agreement prior to the date this provision would take effect. In addition, the bill would allow wine importers affiliated with a U.S. winery that operates under a basic permit to self-certify. Industry and ATF sources indicated that a significant portion of importers would qualify for self-certification. Finally, according to ATF and industry sources, the certification process would not impose significant costs on the affected wine importers. Based on the foregoing information, CBO concludes that the cost of this private-sector

mandate would fall well below the annual threshold established in UMRA (\$115 million in 2002, adjusted annually for inflation).

ESTIMATE PREPARED BY:

Impact on Federal Revenues: Annie Bartsch
Impact on the Private Sector: Lauren Marks

ESTIMATE APPROVED BY:

Tom Woodward
Assistant Director for Tax Analysis

**Exhibit 5. Congressional Budget Office Cost Estimate: H.R.
4944, Miscellaneous Trade and Technical Corrections Act of
2006**



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

May 11, 2006

H.R. 4944 **Miscellaneous Trade and Technical Corrections Act of 2006**

As passed by the House of Representatives on March 15, 2006

SUMMARY

H.R. 4944 is an omnibus trade act that would, in aggregate, reduce receipts and increase outlays by making various changes to trade law. These changes include suspending or reducing duties on specific products, refunding duties already paid on certain entries (reliquidation), extending an expiration date of the African Growth and Opportunity Act (AGOA), and numerous other changes. One provision is expected to increase receipts slightly by clarifying tax law regarding an exemption from excise taxes on tobacco.

The Congressional Budget Office (CBO) and the Joint Committee on Taxation (JCT) estimate that the legislation would decrease governmental receipts by \$14 million in 2006, by \$270 million over the 2007-2011 period, and by \$285 million over the 2007-2016 period. CBO also estimates that the legislation would increase outlays by \$3 million in 2006.

CBO has determined that H.R. 4944 would impose a private-sector mandate, as defined in the Unfunded Mandates Reform Act (UMRA), on certain importers. While the act would temporarily reduce or suspend tariff duties on hundreds of goods, saving millions of dollars for the private sector, it also would impose a mandate on certain importers by raising the tariff duties on certain chemicals imported into the United States. CBO expects that the direct cost of the mandate would be less than \$1 million over the 2007-2011 period, which falls well below the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation). JCT has reviewed the one tax provision of H.R. 4944 and determined that it contains no private-sector mandates.

CBO and JCT have determined that H.R. 4944 contains no intergovernmental mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The following table summarizes the estimated budgetary impact of the legislation.

| | By Fiscal Year, In Millions of Dollars | | | | | | | | | | |
|---------------------------------------------------|----------------------------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| CHANGES IN REVENUES | | | | | | | | | | | |
| Title I: Tariff Provisions | | | | | | | | | | | |
| New Duty Suspensions and Reductions | -14 | -59 | -61 | -62 | -16 | 0 | 0 | 0 | 0 | 0 | 0 |
| Extensions of Existing Suspensions and Reductions | * | -16 | -21 | -21 | -5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Liquidation or Reliquidation of Certain Entries | * | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Provisions | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Title II: Other Trade Provisions | <u>0</u> | <u>0</u> | <u>0</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-4</u> | <u>-5</u> | <u>-5</u> | <u>-5</u> | <u>0</u> |
| Total Changes | -14 | -74 | -82 | -87 | -24 | -3 | -3 | -4 | -4 | -4 | 1 |
| CHANGES IN DIRECT SPENDING | | | | | | | | | | | |
| Liquidation or Reliquidation of Certain Entries | | | | | | | | | | | |
| Estimated Budget Authority | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Estimated Outlays | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

NOTE: Components may not sum to totals because of rounding.

* = Loss of less than \$500,000

BASIS OF ESTIMATE

For the purpose of this estimate, CBO and JCT assume that H.R. 4944 will be enacted by July 1, 2006.

Title I would reduce or suspend the duties on various products imported into the United States, and it would provide additional tariff relief through reliquidation. It also would make various other changes to the Harmonized Tariff Schedule of the United States. Duties on almost 400 products would be newly suspended or reduced by subtitle A. Those products include certain chemical compounds, manufactured goods, and footwear. Based on information from the U.S. International Trade Commission (ITC), CBO estimates that these

provisions would decrease revenues by \$213 million over the 2006-2010 period. (The suspensions and reductions would be effective through December 31, 2009.)

The legislation would also temporarily extend over 150 other previously enacted duty suspensions and reductions through December 31, 2009. CBO estimates that extending those lower duty rates would reduce revenues by \$64 million between 2006 and 2010. In total, CBO estimates subtitle A would reduce governmental receipts by \$278 million over the 2006-2010 period.

Subtitle B of title I would liquidate or reliquidate certain entries of goods imported into the United States, effectively providing refunds of duties paid on previously imported products. CBO estimates that the liquidation and reliquidation provisions would reduce governmental receipts by less than \$500,000 in 2006. Because these provisions require the government to pay interest, in addition to refunding duties paid, CBO estimates that they would also increase outlays by \$3 million in 2006. Most of the outlay effect comes from a provision that would require interest to be paid on certain duties, totaling about \$1.8 million, that were refunded pursuant to prior miscellaneous trade bills.

Additionally, subtitle B includes several miscellaneous trade provisions that CBO estimates would, all in all, have a positive impact on revenues. The positive effect (as estimated by JCT) is mostly generated by a provision that would amend the Internal Revenue Code to clarify what constitutes a delivery sale of tobacco products, for tax and enforcement purposes. The miscellaneous provisions contained in subtitle B would increase revenues by about \$1 million in 2006 and by \$9 million over the 2007-2016 period.

Title II includes a number of other trade provisions. Mainly, the effective date for the duty-free treatment of certain textiles and apparel under AGOA would be changed from September 30, 2008, to September 30, 2015. CBO estimates that this change would reduce revenues by \$31 million over the 2009-2015 period.

CBO bases its estimates of the revenue impact of suspending or reducing duty rates on its most recent projections of non-petroleum imports and on more detailed data from the ITC. The estimates for the remaining revenue provisions in the bill are based on estimates provided by the ITC, on recent data on the collections of customs duties, and on information from various industry sources. Consistent with standard procedures for estimating the revenue impact of indirect business taxes, the gross impact on revenues from customs duties is reduced by 25 percent to reflect offsetting effects on income and payroll tax receipts.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

CBO has determined that H.R. 4944 would impose a private-sector mandate, as defined in the Unfunded Mandates Reform Act (UMRA), on certain importers. While the bill would temporarily reduce or suspend tariff duties on hundreds of goods, saving millions of dollars for the private sector, it also would impose a mandate on certain importers by raising the tariff duties on certain chemicals imported into the United States. CBO expects that the direct cost of the mandate would be less than \$1 million over the 2007-2011 period, which falls well below the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation). JCT has reviewed the one tax provision of H.R. 4944 and determined that it contains no private-sector mandates.

CBO and JCT have determined that H.R. 4944 contains no intergovernmental mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

ESTIMATE PREPARED BY:

Federal Revenues: Emily Schlect

Federal Spending: Ann Futrell

Impact on State, Local, and Tribal Governments: Melissa Merrell

Impact on the Private Sector: Tyler Kruzich

ESTIMATE APPROVED BY:

Roberton C. Williams

Deputy Assistant Director for Tax Analysis

Robert A. Sunshine

Assistant Director for Budget Analysis

**Exhibit 6. Description of GTAP Aggregations, Closure,
Solution Method, and Experiment**

GTAP 5x2x4 aggregation
Developed to analyze the impact of the MTB program.

I. SUMMARY

This version of GTAP uses a 5-sector, 2-region, 4-factor aggregation. The Manufacturing sector is split, creating one sector that imports all MTB imports and has minimal domestic output, and another sector that is the residual. The idea is to reduce duties in the sector with limited domestic participation.

II. REGIONS AND COMMODITIES

The 2 regions are:

USA: United States of America

RestofWorld: People's Republic of China, West Rim of the Pacific, ex. China, Australia, New Zealand, Rest of Oceania, Hong Kong, Japan, Korea, Taiwan, Rest of East Asia, Cambodia, Indonesia, Lao, Myanmar, Malaysia, Philippines, Singapore, Thailand, Viet Nam, Rest of Southeast Asia, Bangladesh, India, Pakistan, Sri Lanka, Canada, Mexico, Rest of North America, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Rest of South America, Costa Rica, Guatemala, Nicaragua, Panama, Rest of Central America, Caribbean, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Switzerland, Norway, Rest of EFTA, Albania, Bulgaria, Belarus, Croatia, Romania, Russian Federation, Ukraine, Rest of Eastern Europe, Rest of Europe, West Asia, Africa, Rest of Middle East, Kazakhstan, Kyrgyzstan, Rest of Former Soviet Union, Armenia, Azerbaijan, Georgia, Islamic Republic of Iran, Turkey, Rest of Western Asia, Egypt, Morocco, Tunisia, Rest of North Africa, Nigeria, Senegal, Rest of Western Africa, Central Africa, South Central Africa, Ethiopia, Madagascar, Malawi, Mauritius, Mozambique, Tanzania, Uganda, Zambia, Zimbabwe, Rest of Eastern Africa, Botswana, South Africa, Rest of South African Customs

The 5 sectors are:

Agriculture: Farming and husbandry
Extr_Util: Extracted natural resources and utilities
MFGDP: Manufactured goods with domestic production
MFGNDP: Manufacturing sector reliant on imports (virtually no domestic production)
Services: All private and government services

which are aggregated as follows:

Agriculture: Paddy rice; Wheat; cereal grains nec; vegetables, fruit, nuts; oil seeds, sugar cane and sugar beet; plant-based fibers; crops nec; cattle, sheep, goats, and horses; animal products not elsewhere classified; raw milk; wool, silk-worm cocoons; bovine cattle, sheep and goat, horse meat products; meat products nec; processed rice

Extr_Util: Forestry; fishing; coal; oil; gas; minerals nec; gas manufacture and distribution; water

MFGDP and MFGNDP: Vegetable oils and fats; dairy products; sugar; food products nec; beverages and tobacco products; textiles; wearing apparel; leather products; wood products; paper products and publishing; petroleum, coal products; chemical, rubber, plastic products; mineral products nec; ferrous metals; metals nec; metal products; motor vehicles and parts; transport equipment nec; electronic equipment; machinery and equipment nec; manufactures nec

version

Services: Construction; trade; other transport nec; sea transport; air transport; communication; financial services nec; insurance; business services nec; recreation and other services; public administration, defence, health, and education; dwellings

The 4 factors are: land, labor, capital, and natural resources

III. EXPERIMENT FILES

Data base: The original aggregation was 4*2*4, with the following sectors: agriculture, extraction/utilities; manufacturing, and services. The program Splitcom was used to create a hypothetical sector, with limited domestic production, that imports all (and only) MTB imports and sells them as intermediate inputs and to final users.

Experiment: The resulting 5*2*4 database was shocked by eliminating the import tariff on MTB imports (tms("MFGNDP", "RestofWorld", "USA")).

Closure: The standard closure was used, with two exceptions: U.S. government spending was fixed, and labor supply was endogenized.

Parameters: Existing data base parameters were used, with one exception. To minimize the impact on domestic production in the hypothetical sector of eliminating duties on MTB imports, the elasticity of imports and domestic production for the hypothetical sector was set to zero.

SOLUTION METHOD

Gragg 2-4-6 with automatic accuracy.

**Exhibit 7. Bureau of Labor Statistics Establishment Data,
Historical Hours and Earnings, Table B-2**

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

B-2. Average hours and earnings of production and nonsupervisory workers(1) on private nonfarm payrolls by major industry sector, 1964 to date

| Year and month | Total private | | | Goods-producing | | | Mining and logging | | | Construction | | |
|----------------------|-----------------|--------------------|--------------------|-----------------|--------------------|--------------------|-----------------------|--------------------|--------------------|-----------------|--------------------|--------------------|
| | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings |
| Annual averages | | | | | | | | | | | | |
| 1964..... | 38.5 | \$2.53 | \$97.41 | 40.3 | \$2.53 | \$101.96 | 43.4 | \$2.76 | \$119.78 | 37.7 | \$3.08 | \$116.12 |
| 1965..... | 38.6 | 2.63 | 101.52 | 40.7 | 2.63 | 107.04 | 43.7 | 2.87 | 125.42 | 37.9 | 3.23 | 122.42 |
| 1966..... | 38.5 | 2.73 | 105.11 | 40.9 | 2.74 | 112.07 | 44.1 | 3.00 | 132.30 | 38.1 | 3.41 | 129.92 |
| 1967..... | 37.9 | 2.85 | 108.02 | 40.3 | 2.87 | 115.66 | 43.9 | 3.14 | 137.85 | 38.1 | 3.63 | 138.30 |
| 1968..... | 37.7 | 3.02 | 113.85 | 40.3 | 3.07 | 123.72 | 44.0 | 3.30 | 145.20 | 37.8 | 3.92 | 148.18 |
| 1969..... | 37.5 | 3.22 | 120.75 | 40.3 | 3.29 | 132.59 | 44.3 | 3.54 | 156.82 | 38.4 | 4.30 | 165.12 |
| 1970..... | 37.0 | 3.40 | 125.80 | 39.6 | 3.52 | 139.39 | 43.9 | 3.77 | 165.50 | 37.8 | 4.74 | 179.17 |
| 1971..... | 36.8 | 3.63 | 133.58 | 39.5 | 3.79 | 149.71 | 43.7 | 3.99 | 174.36 | 37.6 | 5.17 | 194.39 |
| 1972..... | 36.9 | 3.90 | 143.91 | 39.9 | 4.06 | 161.99 | 44.0 | 4.28 | 188.32 | 37.0 | 5.55 | 205.35 |
| 1973..... | 36.9 | 4.14 | 152.77 | 40.1 | 4.34 | 174.03 | 43.8 | 4.59 | 201.04 | 37.2 | 5.89 | 219.11 |
| 1974..... | 36.4 | 4.43 | 161.25 | 39.6 | 4.69 | 185.72 | 43.7 | 5.09 | 222.43 | 37.1 | 6.29 | 233.36 |
| 1975..... | 36.0 | 4.73 | 170.28 | 39.1 | 5.11 | 199.80 | 43.7 | 5.68 | 248.22 | 36.9 | 6.78 | 250.18 |
| 1976..... | 36.1 | 5.06 | 182.67 | 39.7 | 5.49 | 217.95 | 44.2 | 6.19 | 273.60 | 37.3 | 7.17 | 267.44 |
| 1977..... | 35.9 | 5.44 | 195.30 | 39.9 | 5.94 | 237.01 | 44.7 | 6.70 | 299.49 | 37.0 | 7.56 | 279.72 |
| 1978..... | 35.8 | 5.88 | 210.50 | 40.0 | 6.48 | 259.20 | 44.9 | 7.44 | 334.06 | 37.3 | 8.11 | 302.50 |
| 1979..... | 35.6 | 6.34 | 225.70 | 39.8 | 7.04 | 280.19 | 44.7 | 8.20 | 366.54 | 37.5 | 8.71 | 326.63 |
| 1980..... | 35.2 | 6.85 | 241.12 | 39.5 | 7.66 | 302.57 | 44.9 | 8.97 | 402.75 | 37.5 | 9.37 | 351.38 |
| 1981..... | 35.2 | 7.44 | 261.89 | 39.6 | 8.41 | 333.04 | 45.1 | 9.89 | 446.04 | 37.4 | 10.24 | 382.98 |
| 1982..... | 34.7 | 7.87 | 273.09 | 38.8 | 9.00 | 349.20 | 44.1 | 10.64 | 469.22 | 37.2 | 11.04 | 410.69 |
| 1983..... | 34.9 | 8.20 | 286.18 | 39.8 | 9.32 | 370.94 | 43.9 | 11.14 | 489.05 | 37.6 | 11.36 | 427.14 |
| 1984..... | 35.1 | 8.49 | 298.00 | 40.3 | 9.67 | 389.70 | 44.6 | 11.54 | 514.68 | 38.2 | 11.56 | 441.59 |
| 1985..... | 34.9 | 8.74 | 305.03 | 40.1 | 10.01 | 401.40 | 44.6 | 11.87 | 529.40 | 38.2 | 11.75 | 448.85 |
| 1986..... | 34.7 | 8.93 | 309.87 | 40.1 | 10.20 | 409.02 | 43.6 | 12.14 | 529.30 | 37.9 | 11.92 | 451.77 |
| 1987..... | 34.7 | 9.14 | 317.16 | 40.4 | 10.39 | 419.76 | 43.5 | 12.17 | 529.40 | 38.2 | 12.15 | 464.13 |
| 1988..... | 34.6 | 9.44 | 326.62 | 40.4 | 10.69 | 431.88 | 43.3 | 12.45 | 539.09 | 38.2 | 12.52 | 478.26 |
| 1989..... | 34.5 | 9.80 | 338.10 | 40.4 | 11.04 | 446.02 | 44.1 | 12.91 | 569.33 | 38.3 | 12.98 | 497.13 |
| 1990..... | 34.3 | 10.20 | 349.75 | 40.1 | 11.46 | 459.55 | 45.0 | 13.40 | 602.54 | 38.3 | 13.42 | 513.43 |
| 1991..... | 34.1 | 10.52 | 358.51 | 40.1 | 11.76 | 471.32 | 45.3 | 13.82 | 625.42 | 38.1 | 13.65 | 520.41 |
| 1992..... | 34.2 | 10.77 | 368.25 | 40.2 | 11.99 | 482.58 | 44.6 | 14.09 | 629.02 | 38.0 | 13.81 | 525.13 |
| 1993..... | 34.3 | 11.05 | 378.91 | 40.6 | 12.28 | 498.82 | 44.9 | 14.12 | 634.77 | 38.4 | 14.04 | 539.81 |
| 1994..... | 34.5 | 11.34 | 391.22 | 41.1 | 12.63 | 519.58 | 45.3 | 14.41 | 653.14 | 38.8 | 14.38 | 558.53 |
| 1995..... | 34.3 | 11.65 | 400.07 | 40.8 | 12.96 | 528.62 | 45.3 | 14.78 | 670.32 | 38.8 | 14.73 | 571.57 |
| 1996..... | 34.3 | 12.04 | 413.28 | 40.8 | 13.38 | 546.48 | 46.0 | 15.10 | 695.07 | 38.9 | 15.11 | 588.48 |

| | | | | | | | | | | | | |
|-----------|------|-------|--------|------|-------|--------|------|-------|----------|------|-------|--------|
| 1997..... | 34.5 | 12.51 | 431.86 | 41.1 | 13.82 | 568.43 | 46.2 | 15.57 | 720.11 | 38.9 | 15.67 | 609.48 |
| 1998..... | 34.5 | 13.01 | 448.56 | 40.8 | 14.23 | 580.99 | 44.9 | 16.20 | 727.28 | 38.8 | 16.23 | 629.75 |
| 1999..... | 34.3 | 13.49 | 463.15 | 40.8 | 14.71 | 599.99 | 44.2 | 16.33 | 721.74 | 39.0 | 16.80 | 655.11 |
| 2000..... | 34.3 | 14.02 | 481.01 | 40.7 | 15.27 | 621.86 | 44.4 | 16.55 | 734.92 | 39.2 | 17.48 | 685.78 |
| 2001..... | 34.0 | 14.54 | 493.79 | 39.9 | 15.78 | 630.01 | 44.6 | 17.00 | 757.92 | 38.7 | 18.00 | 695.89 |
| 2002..... | 33.9 | 14.97 | 506.75 | 39.9 | 16.33 | 651.61 | 43.2 | 17.19 | 741.97 | 38.4 | 18.52 | 711.82 |
| 2003..... | 33.7 | 15.37 | 518.06 | 39.8 | 16.80 | 669.13 | 43.6 | 17.56 | 765.94 | 38.4 | 18.95 | 726.83 |
| 2004..... | 33.7 | 15.69 | 529.09 | 40.0 | 17.19 | 688.13 | 44.5 | 18.07 | 803.82 | 38.3 | 19.23 | 735.55 |
| 2005..... | 33.8 | 16.13 | 544.33 | 40.1 | 17.60 | 705.31 | 45.6 | 18.72 | 853.71 | 38.6 | 19.46 | 750.22 |
| 2006..... | 33.9 | 16.76 | 567.87 | 40.5 | 18.02 | 730.16 | 45.6 | 19.90 | 907.95 | 39.0 | 20.02 | 781.21 |
| 2007..... | 33.9 | 17.43 | 590.04 | 40.6 | 18.67 | 757.34 | 45.9 | 20.97 | 962.64 | 39.0 | 20.95 | 816.66 |
| 2008..... | 33.6 | 18.08 | 607.99 | 40.2 | 19.33 | 776.60 | 45.1 | 22.50 | 1,013.78 | 38.5 | 21.87 | 842.36 |

Monthly data, not seasonally adjusted

| | | | | | | | | | | | | |
|---------------|------|---------|----------|------|---------|----------|------|---------|----------|------|---------|----------|
| 2008: | | | | | | | | | | | | |
| April..... | 33.6 | \$17.95 | \$603.12 | 40.2 | \$19.09 | \$767.42 | 44.5 | \$21.78 | \$969.21 | 38.4 | \$21.49 | \$825.22 |
| May..... | 33.6 | 17.94 | 602.78 | 40.2 | 19.15 | 769.83 | 44.2 | 21.52 | 951.18 | 38.6 | 21.61 | 834.15 |
| June..... | 34.1 | 18.00 | 613.80 | 40.7 | 19.26 | 783.88 | 45.3 | 21.75 | 985.28 | 39.4 | 21.69 | 854.59 |
| July..... | 33.7 | 18.02 | 607.27 | 40.3 | 19.39 | 781.42 | 44.8 | 22.45 | 1,005.76 | 39.2 | 21.90 | 858.48 |
| August..... | 33.9 | 18.10 | 613.59 | 40.7 | 19.53 | 794.87 | 45.6 | 23.06 | 1,051.54 | 39.5 | 22.16 | 875.32 |
| September.... | 33.6 | 18.25 | 613.20 | 40.3 | 19.63 | 791.09 | 44.9 | 23.19 | 1,041.23 | 38.9 | 22.34 | 869.03 |
| October..... | 33.6 | 18.27 | 613.87 | 40.2 | 19.61 | 788.32 | 45.2 | 22.98 | 1,038.70 | 38.9 | 22.28 | 866.69 |
| November..... | 33.7 | 18.40 | 620.08 | 39.8 | 19.65 | 782.07 | 46.0 | 23.31 | 1,072.26 | 37.9 | 22.32 | 845.93 |
| December..... | 33.2 | 18.40 | 610.88 | 39.4 | 19.75 | 778.15 | 44.2 | 23.53 | 1,040.03 | 37.3 | 22.52 | 840.00 |
| 2009: | | | | | | | | | | | | |
| January..... | 32.9 | 18.49 | 608.32 | 38.8 | 19.64 | 762.03 | 43.6 | 23.41 | 1,020.68 | 37.1 | 22.32 | 828.07 |
| February..... | 33.2 | 18.57 | 616.52 | 38.6 | 19.64 | 758.10 | 43.5 | 23.19 | 1,008.77 | 37.0 | 22.25 | 823.25 |
| March(p)..... | 33.2 | 18.56 | 616.19 | 38.7 | 19.74 | 763.94 | 42.9 | 23.44 | 1,005.58 | 37.3 | 22.46 | 837.76 |
| April(p)..... | 32.8 | 18.51 | 607.13 | 38.4 | 19.80 | 760.32 | 42.6 | 23.54 | 1,002.80 | 37.0 | 22.45 | 830.65 |

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

B-2. Average hours and earnings of production and nonsupervisory workers(1) on private nonfarm payrolls by major industry sector, 1964 to date

| Year and month | Manufacturing | | | | Durable goods | | | | Nondurable goods | | | |
|----------------|-----------------|-----------------|-------------------------------------|-----------------|---------------|-----------------|-------------------------------------|-----------------|------------------|-----------------|-------------------------------------|-----------------|
| | Weekly hours | Hourly earnings | Hourly earnings, excluding overtime | Weekly earnings | Weekly hours | Hourly earnings | Hourly earnings, excluding overtime | Weekly earnings | Weekly hours | Hourly earnings | Hourly earnings, excluding overtime | Weekly earnings |
| | Annual averages | | | | | | | | | | | |
| 1964..... | 40.8 | \$2.41 | \$2.32 | \$98.33 | 41.6 | \$2.65 | \$2.55 | \$110.24 | 39.6 | \$2.06 | \$1.99 | \$81.58 |
| 1965..... | 41.2 | 2.49 | 2.39 | 102.59 | 42.1 | 2.73 | 2.61 | 114.93 | 39.9 | 2.13 | 2.05 | 84.99 |
| 1966..... | 41.4 | 2.60 | 2.48 | 107.64 | 42.3 | 2.84 | 2.70 | 120.13 | 40.1 | 2.22 | 2.13 | 89.02 |
| 1967..... | 40.6 | 2.71 | 2.60 | 110.03 | 41.3 | 2.94 | 2.82 | 121.42 | 39.6 | 2.34 | 2.25 | 92.66 |
| 1968..... | 40.7 | 2.89 | 2.77 | 117.62 | 41.5 | 3.13 | 3.00 | 129.90 | 39.7 | 2.51 | 2.41 | 99.65 |
| 1969..... | 40.6 | 3.07 | 2.94 | 124.64 | 41.4 | 3.32 | 3.18 | 137.45 | 39.5 | 2.68 | 2.57 | 105.86 |
| 1970..... | 39.8 | 3.23 | 3.12 | 128.55 | 40.4 | 3.49 | 3.37 | 141.00 | 39.0 | 2.85 | 2.75 | 111.15 |
| 1971..... | 39.9 | 3.45 | 3.33 | 137.66 | 40.4 | 3.74 | 3.61 | 151.10 | 39.1 | 3.04 | 2.93 | 118.86 |
| 1972..... | 40.6 | 3.70 | 3.55 | 150.22 | 41.3 | 4.01 | 3.84 | 165.61 | 39.5 | 3.25 | 3.12 | 128.38 |
| 1973..... | 40.7 | 3.97 | 3.79 | 161.58 | 41.6 | 4.29 | 4.09 | 178.46 | 39.4 | 3.47 | 3.33 | 136.72 |
| 1974..... | 40.0 | 4.31 | 4.14 | 172.40 | 40.8 | 4.64 | 4.46 | 189.31 | 38.9 | 3.78 | 3.64 | 147.04 |
| 1975..... | 39.5 | 4.71 | 4.56 | 186.05 | 40.0 | 5.09 | 4.93 | 203.60 | 38.6 | 4.14 | 4.00 | 159.80 |
| 1976..... | 40.1 | 5.09 | 4.91 | 204.11 | 40.8 | 5.51 | 5.31 | 224.81 | 39.2 | 4.47 | 4.31 | 175.22 |
| 1977..... | 40.3 | 5.55 | 5.33 | 223.67 | 41.1 | 5.99 | 5.74 | 246.19 | 39.2 | 4.88 | 4.69 | 191.30 |
| 1978..... | 40.4 | 6.05 | 5.79 | 244.42 | 41.2 | 6.51 | 6.22 | 268.21 | 39.2 | 5.30 | 5.10 | 207.76 |
| 1979..... | 40.2 | 6.57 | 6.31 | 264.11 | 40.9 | 7.05 | 6.77 | 288.35 | 39.1 | 5.78 | 5.57 | 226.00 |
| 1980..... | 39.7 | 7.15 | 6.90 | 283.86 | 40.2 | 7.68 | 7.42 | 308.74 | 38.8 | 6.32 | 6.10 | 245.22 |
| 1981..... | 39.8 | 7.86 | 7.60 | 312.83 | 40.3 | 8.45 | 8.17 | 340.54 | 38.9 | 6.95 | 6.72 | 270.36 |
| 1982..... | 38.9 | 8.36 | 8.12 | 325.20 | 39.4 | 8.96 | 8.72 | 353.02 | 38.2 | 7.50 | 7.26 | 286.50 |
| 1983..... | 40.1 | 8.70 | 8.39 | 348.87 | 40.8 | 9.30 | 8.98 | 379.44 | 39.2 | 7.84 | 7.56 | 307.33 |
| 1984..... | 40.7 | 9.05 | 8.69 | 368.34 | 41.5 | 9.65 | 9.25 | 400.48 | 39.4 | 8.14 | 7.83 | 320.72 |
| 1985..... | 40.5 | 9.40 | 9.03 | 380.70 | 41.3 | 10.01 | 9.61 | 413.41 | 39.4 | 8.47 | 8.15 | 333.72 |
| 1986..... | 40.7 | 9.59 | 9.21 | 390.31 | 41.4 | 10.20 | 9.79 | 422.28 | 39.6 | 8.71 | 8.36 | 344.92 |
| 1987..... | 40.9 | 9.77 | 9.35 | 399.59 | 41.6 | 10.35 | 9.90 | 430.56 | 40.0 | 8.93 | 8.55 | 357.20 |
| 1988..... | 41.0 | 10.05 | 9.60 | 412.05 | 41.9 | 10.64 | 10.15 | 445.82 | 39.9 | 9.19 | 8.80 | 366.68 |
| 1989..... | 40.9 | 10.35 | 9.89 | 423.32 | 41.7 | 10.93 | 10.45 | 455.78 | 39.9 | 9.50 | 9.09 | 379.05 |
| 1990..... | 40.5 | 10.78 | 10.28 | 436.16 | 41.1 | 11.40 | 10.89 | 468.43 | 39.6 | 9.87 | 9.41 | 390.73 |
| 1991..... | 40.4 | 11.13 | 10.63 | 449.73 | 40.9 | 11.81 | 11.30 | 483.28 | 39.7 | 10.18 | 9.69 | 404.17 |
| 1992..... | 40.7 | 11.40 | 10.86 | 464.43 | 41.3 | 12.09 | 11.54 | 499.60 | 40.0 | 10.45 | 9.94 | 417.95 |
| 1993..... | 41.1 | 11.70 | 11.10 | 480.83 | 41.9 | 12.41 | 11.78 | 519.81 | 40.1 | 10.70 | 10.16 | 429.15 |
| 1994..... | 41.7 | 12.04 | 11.36 | 502.05 | 42.6 | 12.78 | 12.04 | 544.52 | 40.5 | 10.96 | 10.38 | 443.88 |
| 1995..... | 41.3 | 12.34 | 11.68 | 509.26 | 42.1 | 13.05 | 12.32 | 549.49 | 40.1 | 11.30 | 10.73 | 452.77 |

| | | | | | | | | | | | | |
|-----------|------|-------|-------|--------|------|-------|-------|--------|------|-------|-------|--------|
| 1996..... | 41.3 | 12.75 | 12.05 | 526.55 | 42.1 | 13.45 | 12.69 | 566.53 | 40.1 | 11.68 | 11.07 | 467.88 |
| 1997..... | 41.7 | 13.14 | 12.37 | 548.22 | 42.6 | 13.83 | 13.00 | 589.06 | 40.5 | 12.04 | 11.38 | 487.04 |
| 1998..... | 41.4 | 13.45 | 12.70 | 557.12 | 42.1 | 14.07 | 13.28 | 591.77 | 40.5 | 12.45 | 11.78 | 504.02 |
| 1999..... | 41.4 | 13.85 | 13.08 | 573.14 | 41.9 | 14.46 | 13.65 | 606.55 | 40.4 | 12.85 | 12.16 | 519.95 |
| 2000..... | 41.3 | 14.32 | 13.55 | 590.77 | 41.8 | 14.92 | 14.11 | 624.22 | 40.3 | 13.31 | 12.61 | 536.82 |
| 2001..... | 40.3 | 14.76 | 14.06 | 595.19 | 40.6 | 15.38 | 14.67 | 624.47 | 39.9 | 13.75 | 13.09 | 548.41 |
| 2002..... | 40.5 | 15.29 | 14.54 | 618.75 | 40.8 | 16.02 | 15.23 | 652.94 | 40.0 | 14.15 | 13.44 | 566.72 |
| 2003..... | 40.4 | 15.74 | 14.96 | 635.99 | 40.8 | 16.45 | 15.63 | 671.21 | 39.8 | 14.63 | 13.91 | 582.61 |
| 2004..... | 40.8 | 16.14 | 15.29 | 658.49 | 41.3 | 16.82 | 15.92 | 694.06 | 40.0 | 15.05 | 14.27 | 602.53 |
| 2005..... | 40.7 | 16.56 | 15.68 | 673.30 | 41.1 | 17.33 | 16.41 | 712.95 | 39.9 | 15.27 | 14.47 | 609.24 |
| 2006..... | 41.1 | 16.81 | 15.96 | 691.02 | 41.4 | 17.68 | 16.79 | 732.00 | 40.6 | 15.33 | 14.54 | 621.97 |
| 2007..... | 41.2 | 17.26 | 16.43 | 711.56 | 41.5 | 18.20 | 17.32 | 754.77 | 40.8 | 15.67 | 14.91 | 639.99 |
| 2008..... | 40.8 | 17.74 | 16.97 | 724.23 | 41.1 | 18.70 | 17.89 | 767.56 | 40.4 | 16.15 | 15.44 | 652.20 |

Monthly data, not seasonally adjusted

| | | | | | | | | | | | | |
|---------------|------|---------|---------|----------|------|---------|---------|----------|------|---------|---------|----------|
| 2008: | | | | | | | | | | | | |
| April..... | 41.0 | \$17.64 | \$16.86 | \$723.24 | 41.3 | \$18.59 | \$17.75 | \$767.77 | 40.4 | \$16.03 | \$15.33 | \$647.61 |
| May..... | 40.9 | 17.65 | 16.89 | 721.89 | 41.2 | 18.60 | 17.78 | 766.32 | 40.3 | 16.05 | 15.35 | 646.82 |
| June..... | 41.2 | 17.73 | 16.93 | 730.48 | 41.5 | 18.70 | 17.86 | 776.05 | 40.6 | 16.08 | 15.36 | 652.85 |
| July..... | 40.6 | 17.73 | 16.96 | 719.84 | 40.8 | 18.66 | 17.87 | 761.33 | 40.3 | 16.20 | 15.47 | 652.86 |
| August..... | 41.0 | 17.75 | 16.94 | 727.75 | 41.4 | 18.72 | 17.88 | 775.01 | 40.5 | 16.15 | 15.41 | 654.08 |
| September.... | 40.9 | 17.84 | 17.05 | 729.66 | 41.0 | 18.80 | 17.99 | 770.80 | 40.7 | 16.30 | 15.54 | 663.41 |
| October..... | 40.7 | 17.86 | 17.10 | 726.90 | 40.8 | 18.81 | 18.04 | 767.45 | 40.4 | 16.32 | 15.59 | 659.33 |
| November..... | 40.5 | 17.94 | 17.22 | 726.57 | 40.5 | 18.92 | 18.20 | 766.26 | 40.3 | 16.35 | 15.65 | 658.91 |
| December..... | 40.3 | 18.06 | 17.37 | 727.82 | 40.5 | 19.06 | 18.36 | 771.93 | 40.0 | 16.43 | 15.78 | 657.20 |
| 2009: | | | | | | | | | | | | |
| January..... | 39.5 | 18.03 | 17.43 | 712.19 | 39.5 | 18.99 | 18.41 | 750.11 | 39.4 | 16.51 | 15.90 | 650.49 |
| February..... | 39.2 | 18.07 | 17.51 | 708.34 | 39.2 | 19.09 | 18.55 | 748.33 | 39.1 | 16.48 | 15.91 | 644.37 |
| March(p)..... | 39.2 | 18.09 | 17.53 | 709.13 | 39.2 | 19.18 | 18.63 | 751.86 | 39.2 | 16.42 | 15.85 | 643.66 |
| April(p)..... | 38.9 | 18.14 | 17.62 | 705.65 | 39.0 | 19.22 | 18.72 | 749.58 | 38.8 | 16.49 | 15.96 | 639.81 |

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

B-2. Average hours and earnings of production and nonsupervisory workers(1) on private nonfarm payrolls by major industry sector, 1964 to date

| Year and month | Private service-providing | | | Trade, transportation, and utilities | | | Information | | | Financial activities | | |
|-----------------|---------------------------|-----------------|-----------------|--------------------------------------|-----------------|-----------------|--------------|-----------------|-----------------|----------------------|-----------------|-----------------|
| | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings |
| Annual averages | | | | | | | | | | | | |
| 1964..... | 37.5 | \$2.53 | \$94.88 | 39.7 | \$2.85 | \$113.15 | 38.2 | \$4.35 | \$166.17 | 37.2 | \$2.29 | \$85.19 |
| 1965..... | 37.3 | 2.63 | 98.10 | 39.6 | 2.94 | 116.42 | 38.3 | 4.47 | 171.20 | 37.1 | 2.38 | 88.30 |
| 1966..... | 36.9 | 2.73 | 100.74 | 39.1 | 3.04 | 118.86 | 38.3 | 4.56 | 174.65 | 37.2 | 2.47 | 91.88 |
| 1967..... | 36.4 | 2.84 | 103.38 | 38.5 | 3.15 | 121.28 | 37.6 | 4.68 | 175.97 | 36.9 | 2.58 | 95.20 |
| 1968..... | 36.1 | 2.99 | 107.94 | 38.2 | 3.32 | 126.82 | 37.6 | 4.85 | 182.36 | 36.8 | 2.75 | 101.20 |
| 1969..... | 35.9 | 3.17 | 113.80 | 37.9 | 3.48 | 131.89 | 37.6 | 5.05 | 189.88 | 36.9 | 2.92 | 107.75 |
| 1970..... | 35.5 | 3.34 | 118.57 | 37.6 | 3.65 | 137.24 | 37.2 | 5.25 | 195.30 | 36.6 | 3.07 | 112.36 |
| 1971..... | 35.3 | 3.54 | 124.96 | 37.4 | 3.86 | 144.36 | 37.0 | 5.53 | 204.61 | 36.4 | 3.23 | 117.57 |
| 1972..... | 35.2 | 3.82 | 134.46 | 37.4 | 4.23 | 158.20 | 37.3 | 5.87 | 218.95 | 36.4 | 3.37 | 122.67 |
| 1973..... | 35.1 | 4.03 | 141.45 | 37.2 | 4.45 | 165.54 | 37.3 | 6.17 | 230.14 | 36.4 | 3.55 | 129.22 |
| 1974..... | 34.8 | 4.29 | 149.29 | 36.8 | 4.74 | 174.43 | 37.0 | 6.52 | 241.24 | 36.3 | 3.80 | 137.94 |
| 1975..... | 34.5 | 4.55 | 156.98 | 36.4 | 5.02 | 182.73 | 36.6 | 6.92 | 253.27 | 36.2 | 4.08 | 147.70 |
| 1976..... | 34.3 | 4.84 | 166.50 | 36.3 | 5.31 | 192.75 | 36.7 | 7.37 | 270.48 | 36.2 | 4.30 | 155.66 |
| 1977..... | 34.1 | 5.17 | 176.30 | 36.0 | 5.67 | 204.12 | 36.8 | 7.84 | 288.51 | 36.2 | 4.58 | 165.80 |
| 1978..... | 33.8 | 5.56 | 188.48 | 35.6 | 6.10 | 217.16 | 36.8 | 8.34 | 306.91 | 36.1 | 4.93 | 177.97 |
| 1979..... | 33.6 | 5.96 | 200.85 | 35.4 | 6.55 | 231.87 | 36.6 | 8.86 | 324.28 | 35.9 | 5.31 | 190.63 |
| 1980..... | 33.4 | 6.43 | 214.76 | 35.0 | 7.04 | 246.40 | 36.3 | 9.47 | 343.76 | 36.0 | 5.82 | 209.52 |
| 1981..... | 33.3 | 6.95 | 231.44 | 34.9 | 7.55 | 263.50 | 36.3 | 10.21 | 370.62 | 36.0 | 6.34 | 228.24 |
| 1982..... | 33.2 | 7.36 | 244.35 | 34.6 | 7.91 | 273.69 | 35.8 | 10.76 | 385.21 | 36.0 | 6.82 | 245.52 |
| 1983..... | 33.2 | 7.71 | 255.97 | 34.6 | 8.23 | 284.76 | 36.2 | 11.18 | 404.72 | 35.9 | 7.32 | 262.79 |
| 1984..... | 33.2 | 7.96 | 264.27 | 34.7 | 8.45 | 293.22 | 36.6 | 11.50 | 420.90 | 36.2 | 7.65 | 276.93 |
| 1985..... | 33.0 | 8.18 | 269.94 | 34.4 | 8.60 | 295.84 | 36.5 | 11.81 | 431.07 | 36.1 | 7.97 | 287.72 |
| 1986..... | 32.9 | 8.39 | 276.03 | 34.1 | 8.74 | 298.03 | 36.4 | 12.08 | 439.71 | 36.1 | 8.37 | 302.16 |
| 1987..... | 32.8 | 8.63 | 283.93 | 34.1 | 8.92 | 304.17 | 36.5 | 12.36 | 451.14 | 36.0 | 8.73 | 314.28 |
| 1988..... | 32.7 | 8.93 | 292.01 | 33.8 | 9.15 | 309.27 | 36.1 | 12.63 | 455.94 | 35.6 | 9.07 | 322.89 |
| 1989..... | 32.6 | 9.33 | 304.16 | 33.8 | 9.46 | 319.75 | 36.1 | 12.99 | 468.94 | 35.6 | 9.54 | 339.62 |
| 1990..... | 32.5 | 9.72 | 316.03 | 33.7 | 9.83 | 331.55 | 35.8 | 13.40 | 479.50 | 35.5 | 9.99 | 354.66 |
| 1991..... | 32.4 | 10.07 | 325.90 | 33.7 | 10.08 | 339.19 | 35.6 | 13.90 | 495.17 | 35.5 | 10.42 | 369.57 |
| 1992..... | 32.5 | 10.35 | 336.08 | 33.8 | 10.30 | 348.68 | 35.8 | 14.29 | 512.20 | 35.6 | 10.86 | 386.01 |
| 1993..... | 32.5 | 10.62 | 345.65 | 34.1 | 10.55 | 359.33 | 36.0 | 14.86 | 535.19 | 35.5 | 11.36 | 403.02 |
| 1994..... | 32.7 | 10.89 | 355.63 | 34.3 | 10.80 | 370.38 | 36.0 | 15.32 | 551.21 | 35.5 | 11.82 | 419.20 |
| 1995..... | 32.6 | 11.21 | 364.80 | 34.1 | 11.10 | 378.79 | 36.0 | 15.68 | 564.92 | 35.5 | 12.28 | 436.12 |
| 1996..... | 32.6 | 11.59 | 377.37 | 34.1 | 11.46 | 390.64 | 36.4 | 16.30 | 592.72 | 35.5 | 12.71 | 451.49 |

| | | | | | | | | | | | | |
|-----------|------|-------|--------|------|-------|--------|------|-------|--------|------|-------|--------|
| 1997..... | 32.8 | 12.07 | 395.51 | 34.3 | 11.90 | 407.54 | 36.3 | 17.14 | 622.37 | 35.7 | 13.22 | 472.37 |
| 1998..... | 32.8 | 12.61 | 413.50 | 34.2 | 12.39 | 423.30 | 36.6 | 17.67 | 646.34 | 36.0 | 13.93 | 500.98 |
| 1999..... | 32.7 | 13.09 | 427.98 | 33.9 | 12.82 | 434.31 | 36.7 | 18.40 | 675.47 | 35.8 | 14.47 | 517.57 |
| 2000..... | 32.7 | 13.62 | 445.74 | 33.8 | 13.31 | 449.88 | 36.8 | 19.07 | 700.86 | 35.9 | 14.98 | 537.37 |
| 2001..... | 32.5 | 14.18 | 461.08 | 33.5 | 13.70 | 459.53 | 36.9 | 19.80 | 730.88 | 35.8 | 15.59 | 557.92 |
| 2002..... | 32.5 | 14.59 | 473.80 | 33.6 | 14.02 | 471.27 | 36.5 | 20.20 | 737.77 | 35.6 | 16.17 | 575.54 |
| 2003..... | 32.3 | 14.99 | 484.68 | 33.6 | 14.34 | 481.14 | 36.2 | 21.01 | 760.45 | 35.5 | 17.14 | 609.08 |
| 2004..... | 32.3 | 15.29 | 494.22 | 33.5 | 14.58 | 488.42 | 36.3 | 21.40 | 777.25 | 35.5 | 17.52 | 622.87 |
| 2005..... | 32.4 | 15.74 | 509.58 | 33.4 | 14.92 | 498.43 | 36.5 | 22.06 | 805.08 | 35.9 | 17.95 | 644.99 |
| 2006..... | 32.5 | 16.42 | 532.78 | 33.4 | 15.39 | 514.34 | 36.6 | 23.23 | 850.42 | 35.7 | 18.80 | 672.21 |
| 2007..... | 32.4 | 17.11 | 554.89 | 33.3 | 15.78 | 526.07 | 36.5 | 23.96 | 874.65 | 35.9 | 19.64 | 705.13 |
| 2008..... | 32.3 | 17.77 | 574.31 | 33.2 | 16.16 | 535.79 | 36.7 | 24.77 | 908.44 | 35.8 | 20.27 | 726.37 |

Monthly data, not seasonally adjusted

| | | | | | | | | | | | | |
|---------------|------|---------|----------|------|---------|----------|------|---------|----------|------|---------|----------|
| 2008: | | | | | | | | | | | | |
| April..... | 32.2 | \$17.67 | \$568.97 | 33.1 | \$16.13 | \$533.90 | 36.3 | \$24.56 | \$891.53 | 35.7 | \$20.21 | \$721.50 |
| May..... | 32.3 | 17.64 | 569.77 | 33.1 | 16.12 | 533.57 | 36.2 | 24.65 | 892.33 | 35.6 | 20.19 | 718.76 |
| June..... | 32.8 | 17.68 | 579.90 | 33.7 | 16.17 | 544.93 | 37.1 | 24.78 | 919.34 | 36.4 | 20.26 | 737.46 |
| July..... | 32.4 | 17.68 | 572.83 | 33.3 | 16.18 | 538.79 | 36.8 | 24.75 | 910.80 | 35.6 | 20.19 | 718.76 |
| August..... | 32.5 | 17.73 | 576.23 | 33.4 | 16.21 | 541.41 | 36.9 | 24.87 | 917.70 | 35.8 | 20.29 | 726.38 |
| September.... | 32.3 | 17.90 | 578.17 | 33.4 | 16.27 | 543.42 | 37.0 | 25.03 | 926.11 | 35.7 | 20.42 | 728.99 |
| October..... | 32.2 | 17.94 | 577.67 | 33.0 | 16.24 | 535.92 | 36.9 | 25.06 | 924.71 | 35.7 | 20.41 | 728.64 |
| November..... | 32.5 | 18.10 | 588.25 | 33.0 | 16.26 | 536.58 | 37.4 | 25.03 | 936.12 | 36.7 | 20.54 | 753.82 |
| December..... | 32.0 | 18.09 | 578.88 | 32.9 | 16.14 | 531.01 | 36.9 | 24.86 | 917.33 | 35.7 | 20.50 | 731.85 |
| 2009: | | | | | | | | | | | | |
| January..... | 31.8 | 18.23 | 579.71 | 32.4 | 16.37 | 530.39 | 36.8 | 25.03 | 921.10 | 35.9 | 20.48 | 735.23 |
| February..... | 32.3 | 18.33 | 592.06 | 32.7 | 16.47 | 538.57 | 37.1 | 25.12 | 931.95 | 36.8 | 20.68 | 761.02 |
| March(p)..... | 32.2 | 18.31 | 589.58 | 32.7 | 16.43 | 537.26 | 36.8 | 25.39 | 934.35 | 36.4 | 20.70 | 753.48 |
| April(p)..... | 31.9 | 18.24 | 581.86 | 32.6 | 16.41 | 534.97 | 36.2 | 25.27 | 914.77 | 35.8 | 20.66 | 739.63 |

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

B-2. Average hours and earnings of production and nonsupervisory workers(1) on private nonfarm payrolls by major industry sector, 1964 to date

| Year and month | Professional and business services | | | Education and health services | | | Leisure and hospitality | | | Other services | | |
|----------------|------------------------------------|-----------------|-----------------|-------------------------------|-----------------|-----------------|-------------------------|-----------------|-----------------|----------------|-----------------|-----------------|
| | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings |
| | Annual averages | | | | | | | | | | | |
| 1964..... | 37.4 | \$3.17 | \$118.56 | 35.5 | \$2.01 | \$71.36 | 32.8 | \$1.09 | \$35.75 | 36.3 | \$1.14 | \$41.38 |
| 1965..... | 37.3 | 3.28 | 122.34 | 35.2 | 2.12 | 74.62 | 32.5 | 1.17 | 38.03 | 36.1 | 1.25 | 45.13 |
| 1966..... | 37.0 | 3.39 | 125.43 | 34.9 | 2.23 | 77.83 | 31.9 | 1.26 | 40.19 | 35.8 | 1.37 | 49.05 |
| 1967..... | 36.6 | 3.51 | 128.47 | 34.5 | 2.36 | 81.42 | 31.3 | 1.37 | 42.88 | 35.4 | 1.49 | 52.75 |
| 1968..... | 36.3 | 3.65 | 132.50 | 34.1 | 2.49 | 84.91 | 30.8 | 1.53 | 47.12 | 35.0 | 1.62 | 56.70 |
| 1969..... | 36.3 | 3.84 | 139.39 | 34.1 | 2.68 | 91.39 | 30.4 | 1.69 | 51.38 | 35.0 | 1.81 | 63.35 |
| 1970..... | 35.9 | 4.04 | 145.04 | 33.8 | 2.88 | 97.34 | 30.0 | 1.82 | 54.60 | 34.7 | 2.01 | 69.75 |
| 1971..... | 35.5 | 4.26 | 151.23 | 33.3 | 3.11 | 103.56 | 29.9 | 1.95 | 58.31 | 34.2 | 2.24 | 76.61 |
| 1972..... | 35.5 | 4.50 | 159.75 | 33.3 | 3.33 | 110.89 | 29.7 | 2.08 | 61.78 | 34.2 | 2.46 | 84.13 |
| 1973..... | 35.5 | 4.72 | 167.56 | 33.3 | 3.54 | 117.88 | 29.4 | 2.20 | 64.68 | 34.1 | 2.67 | 91.05 |
| 1974..... | 35.3 | 5.01 | 176.85 | 33.1 | 3.82 | 126.44 | 29.1 | 2.40 | 69.84 | 33.9 | 2.95 | 100.01 |
| 1975..... | 35.1 | 5.29 | 185.68 | 33.0 | 4.09 | 134.97 | 28.8 | 2.58 | 74.30 | 33.8 | 3.21 | 108.50 |
| 1976..... | 34.9 | 5.60 | 195.44 | 32.7 | 4.39 | 143.55 | 28.5 | 2.78 | 79.23 | 33.6 | 3.51 | 117.94 |
| 1977..... | 34.7 | 5.95 | 206.47 | 32.5 | 4.72 | 153.40 | 28.1 | 3.03 | 85.14 | 33.4 | 3.84 | 128.26 |
| 1978..... | 34.6 | 6.32 | 218.67 | 32.3 | 5.07 | 163.76 | 27.7 | 3.33 | 92.24 | 33.2 | 4.19 | 139.11 |
| 1979..... | 34.4 | 6.71 | 230.82 | 32.2 | 5.44 | 175.17 | 27.4 | 3.63 | 99.46 | 33.0 | 4.56 | 150.48 |
| 1980..... | 34.3 | 7.22 | 247.65 | 32.1 | 5.93 | 190.35 | 27.0 | 3.98 | 107.46 | 33.0 | 5.05 | 166.65 |
| 1981..... | 34.3 | 7.80 | 267.54 | 32.1 | 6.49 | 208.33 | 26.9 | 4.36 | 117.28 | 33.0 | 5.61 | 185.13 |
| 1982..... | 34.2 | 8.30 | 283.86 | 32.1 | 7.00 | 224.70 | 26.8 | 4.63 | 124.08 | 33.0 | 6.11 | 201.63 |
| 1983..... | 34.4 | 8.70 | 299.28 | 32.1 | 7.39 | 237.22 | 26.8 | 4.89 | 131.05 | 33.0 | 6.51 | 214.83 |
| 1984..... | 34.3 | 8.98 | 308.01 | 32.0 | 7.67 | 245.44 | 26.7 | 4.99 | 133.23 | 32.9 | 6.79 | 223.39 |
| 1985..... | 34.2 | 9.28 | 317.38 | 31.9 | 7.98 | 254.56 | 26.4 | 5.10 | 134.64 | 32.8 | 7.10 | 232.88 |
| 1986..... | 34.3 | 9.55 | 327.57 | 32.0 | 8.25 | 264.00 | 26.2 | 5.20 | 136.24 | 32.9 | 7.38 | 242.80 |
| 1987..... | 34.3 | 9.85 | 337.86 | 32.0 | 8.57 | 274.24 | 26.3 | 5.30 | 139.39 | 32.8 | 7.69 | 252.23 |
| 1988..... | 34.2 | 10.22 | 349.52 | 32.0 | 8.96 | 286.72 | 26.3 | 5.50 | 144.65 | 32.9 | 8.08 | 265.83 |
| 1989..... | 34.2 | 10.69 | 365.60 | 32.0 | 9.46 | 302.72 | 26.1 | 5.76 | 150.34 | 32.9 | 8.58 | 282.28 |
| 1990..... | 34.2 | 11.14 | 380.52 | 31.9 | 10.00 | 319.27 | 26.0 | 6.02 | 156.32 | 32.8 | 9.08 | 297.91 |
| 1991..... | 34.0 | 11.50 | 391.09 | 31.9 | 10.49 | 334.55 | 25.6 | 6.22 | 159.15 | 32.7 | 9.39 | 306.91 |
| 1992..... | 34.0 | 11.78 | 400.64 | 32.0 | 10.87 | 348.29 | 25.7 | 6.36 | 163.70 | 32.6 | 9.66 | 315.08 |
| 1993..... | 34.0 | 11.96 | 406.20 | 32.0 | 11.21 | 359.08 | 25.9 | 6.48 | 167.56 | 32.6 | 9.90 | 322.69 |
| 1994..... | 34.1 | 12.15 | 414.16 | 32.0 | 11.50 | 368.14 | 26.0 | 6.62 | 172.33 | 32.7 | 10.18 | 332.44 |
| 1995..... | 34.0 | 12.53 | 426.44 | 32.0 | 11.80 | 377.73 | 25.9 | 6.79 | 175.74 | 32.6 | 10.51 | 342.36 |
| 1996..... | 34.1 | 13.00 | 442.81 | 31.9 | 12.17 | 388.27 | 25.9 | 6.99 | 180.98 | 32.5 | 10.85 | 352.62 |

| | | | | | | | | | | | | |
|-----------|------|-------|--------|------|-------|--------|------|-------|--------|------|-------|--------|
| 1997..... | 34.3 | 13.57 | 465.51 | 32.2 | 12.56 | 404.65 | 26.0 | 7.32 | 190.52 | 32.7 | 11.29 | 368.63 |
| 1998..... | 34.3 | 14.27 | 490.00 | 32.2 | 13.00 | 418.82 | 26.2 | 7.67 | 200.82 | 32.6 | 11.79 | 384.25 |
| 1999..... | 34.4 | 14.85 | 510.99 | 32.1 | 13.44 | 431.35 | 26.1 | 7.96 | 208.05 | 32.5 | 12.26 | 398.77 |
| 2000..... | 34.5 | 15.52 | 535.07 | 32.2 | 13.95 | 449.29 | 26.1 | 8.32 | 217.20 | 32.5 | 12.73 | 413.41 |
| 2001..... | 34.2 | 16.33 | 557.84 | 32.3 | 14.64 | 473.39 | 25.8 | 8.57 | 220.73 | 32.3 | 13.27 | 428.64 |
| 2002..... | 34.2 | 16.81 | 574.66 | 32.4 | 15.21 | 492.74 | 25.8 | 8.81 | 227.17 | 32.0 | 13.72 | 439.76 |
| 2003..... | 34.1 | 17.21 | 587.02 | 32.3 | 15.64 | 505.69 | 25.6 | 9.00 | 230.42 | 31.4 | 13.84 | 434.41 |
| 2004..... | 34.2 | 17.48 | 597.56 | 32.4 | 16.15 | 523.78 | 25.7 | 9.15 | 234.86 | 31.0 | 13.98 | 433.04 |
| 2005..... | 34.2 | 18.08 | 618.87 | 32.6 | 16.71 | 544.59 | 25.7 | 9.38 | 241.36 | 30.9 | 14.34 | 443.37 |
| 2006..... | 34.6 | 19.13 | 662.27 | 32.5 | 17.38 | 564.94 | 25.7 | 9.75 | 250.34 | 30.9 | 14.77 | 456.50 |
| 2007..... | 34.8 | 20.15 | 700.82 | 32.6 | 18.11 | 590.09 | 25.5 | 10.41 | 265.52 | 30.9 | 15.42 | 477.06 |
| 2008..... | 34.8 | 21.19 | 738.25 | 32.5 | 18.88 | 614.30 | 25.2 | 10.84 | 273.27 | 30.8 | 16.08 | 494.99 |

Monthly data, not seasonally adjusted

| | | | | | | | | | | | | |
|---------------|------|---------|----------|------|---------|----------|------|---------|----------|------|---------|----------|
| 2008: | | | | | | | | | | | | |
| April..... | 34.8 | \$20.91 | \$727.67 | 32.4 | \$18.75 | \$607.50 | 25.2 | \$10.81 | \$272.41 | 30.7 | \$16.09 | \$493.96 |
| May..... | 34.8 | 20.88 | 726.62 | 32.5 | 18.76 | 609.70 | 25.3 | 10.83 | 274.00 | 30.7 | 16.11 | 494.58 |
| June..... | 35.5 | 21.09 | 748.70 | 32.7 | 18.79 | 614.43 | 26.0 | 10.78 | 280.28 | 31.1 | 16.10 | 500.71 |
| July..... | 34.7 | 21.06 | 730.78 | 32.6 | 18.96 | 618.10 | 25.8 | 10.73 | 276.83 | 30.9 | 16.06 | 496.25 |
| August..... | 35.0 | 21.12 | 739.20 | 32.6 | 18.95 | 617.77 | 25.8 | 10.79 | 278.38 | 31.1 | 16.10 | 500.71 |
| September.... | 34.7 | 21.31 | 739.46 | 32.5 | 19.08 | 620.10 | 25.0 | 10.89 | 272.25 | 30.7 | 16.22 | 497.95 |
| October..... | 35.0 | 21.45 | 750.75 | 32.4 | 19.04 | 616.90 | 25.0 | 10.93 | 273.25 | 30.7 | 16.17 | 496.42 |
| November..... | 35.3 | 21.97 | 775.54 | 32.7 | 19.10 | 624.57 | 25.0 | 10.93 | 273.25 | 30.9 | 16.24 | 501.82 |
| December..... | 34.6 | 22.01 | 761.55 | 32.3 | 19.23 | 621.13 | 24.5 | 11.05 | 270.73 | 30.5 | 16.27 | 496.24 |
| 2009: | | | | | | | | | | | | |
| January..... | 34.4 | 22.16 | 762.30 | 32.3 | 19.26 | 622.10 | 24.0 | 11.03 | 264.72 | 30.5 | 16.34 | 498.37 |
| February..... | 34.9 | 22.52 | 785.95 | 32.4 | 19.26 | 624.02 | 24.9 | 11.06 | 275.39 | 30.7 | 16.34 | 501.64 |
| March(p)..... | 34.9 | 22.54 | 786.65 | 32.5 | 19.20 | 624.00 | 24.8 | 10.99 | 272.55 | 30.5 | 16.34 | 498.37 |
| April(p)..... | 34.4 | 22.28 | 766.43 | 32.3 | 19.29 | 623.07 | 24.6 | 10.97 | 269.86 | 30.4 | 16.30 | 495.52 |

1 Data relate to production workers in mining and logging and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

p = preliminary.

NOTE: Data are currently projected from March 2008 benchmark levels. When more recent benchmark data are introduced with the release of January 2010 estimates, all unadjusted data from April 2008 forward are subject to revision.

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