

**Impact of Increased Minimum Wages on the
Economies of American Samoa and the
Commonwealth of the Northern Mariana Islands**

Prepared by

Office of the Assistant Secretary for Policy
U.S. Department of Labor

January 2008

In response to the requirements of
Public Law No. 110-28, sec. 8104, 121 Stat. 112, 189 (2007)

United States Department of Labor

Table of Contents

Executive Summary	ii
Section 1. Introduction	1
Section 2. American Samoa	5
Section 3. The Commonwealth of the Northern Mariana Islands	23
Bibliography	40

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Executive Summary

This report was prepared by the U.S. Department of Labor in response to the requirement of Public Law 110-28, the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007. That law states that the Secretary of Labor shall report to Congress the findings of a study assessing and projecting the impacts of increases in the minimum wages applicable to the territories of American Samoa and the Commonwealth of the Northern Mariana Islands (CNMI) under the Fair Labor Standards Act (FLSA).

Pursuant to P.L. 110-28, the minimum wages applicable to American Samoa and the Commonwealth of the Northern Mariana Islands (CNMI) were increased fifty cents per hour on July 24 and July 25, 2007, respectively. In addition, the minimum wages applicable to these territories will further increase annually hereafter by fifty cents per year until parity with the projected U.S. minimum wage of \$7.25 per hour is reached. For the CNMI, the minimum wage was increased fifty cents per hour to \$3.55 on July 25, 2007 and will rise to \$7.25 per hour by 2015. For American Samoa current minimum wages vary by industry, with the most significant being the minimum wage for the tuna canning industry, which is currently \$3.76 per hour, reflecting the initial fifty-cent increase on July 24, 2007. The minimum wage for American Samoa will increase across the board to \$7.25 per hour by 2014.

This report is limited to addressing the two questions contained in the Congressional mandate:

(1) what has been the impact on living standards and employment to the present date of the fifty-cent-per-hour increase in the minimum wages of each territory that became effective July 2007; and

(2) what are the projected impacts of the future increases scheduled under the Act?

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

The ability of the Department to answer these questions was constrained by the short time frame available for observation of emerging effects and by the lack of timely labor market data for both territories.

American Samoa

American Samoa is a small island group in the South Pacific, about 2,300 miles south of Hawaii. The population of American Samoa is 68,200, of which 38.7 percent is under the age of 15. The largest sources of private employment in American Samoa are two tuna canneries. These canneries export tuna primarily to the U.S. market, and their output accounts for about two-thirds of the total U.S. supply of canned tuna. Tuna exports from American Samoa in 2006 totaled 20.7 million cases, valued at \$431.5 million. The tuna canneries account for 4,757 jobs – 27.3 percent of total employment in American Samoa.

Today, the majority of cannery workers earn the minimum wage, and in 2006, the average wage earned by workers in the fish processing and canning industry covered by the FLSA was \$3.60 per hour. The average wage in 2006 for all workers in American Samoa covered by the FLSA was \$5.26 per hour. Nearly 80 percent of workers covered by the FLSA earned under \$7.25 per hour. By comparison, if the U.S. minimum wage were increased to the level of the 75th percentile of hourly-paid U.S. workers, it would be raised to \$16.50 per hour.

At present, the tuna canneries continue in operation, but there is concern that they will be closed prior to the escalation of the minimum wage to \$7.25 per hour in 2014 and that production will be shifted to facilities outside U.S. jurisdiction where labor costs are significantly lower. An input-output model analysis commissioned by the government of American Samoa (conducted by McPhee and Associates) has estimated that closure of the tuna canneries will cause a total loss of 8,118 jobs – 45.6 percent of total employment – including both direct effects (5,538 jobs) and indirect effects (2,580 jobs).

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Commonwealth of the Northern Mariana Islands

The Commonwealth of the Northern Mariana Islands (CNMI) is the U.S. territory closest to eastern Asia. The CNMI is about 1,500 miles east of Japan. Its population reached 69,221 in 2000, but had declined to 63,419 by 2003, and evidence suggests that the population decline is continuing. The CNMI economy developed rapidly in the 1990s, based on tourism and a garment industry in which labor supply was comprised largely of foreign temporary workers. In 2000, non-citizens accounted for 88.8 percent of private sector employment. The minimum wage in CNMI was (and still is today) lower than the U.S. minimum wage, but higher than comparable wages in China, the Philippines, Vietnam, and other Asian countries.

In the past, the CNMI economy benefited from tariff-free, unrestricted access to U.S. markets, compared to competitors in Asia and elsewhere who benefited from lower wages but faced U.S. tariffs and import quotas. However, both the tourism and the garment industries in the CNMI are now in decline. The garment industry has been shrinking since 2000 in the face of increasing global competition, and especially since the lifting of import quotas and resulting liberalization of textile and garment trade into the U.S. in 2005. The tourist industry has suffered sporadic decline since the mid-1990s.

The scheduled minimum wage increases for the CNMI are expected to add further challenges to an already declining economy. With both of its major industries declining simultaneously, the CNMI economy is in overall decline, and its current economic situation makes it especially vulnerable to additional shocks. While data are not available to precisely quantify the impact of the recent and scheduled future increases in the minimum wage, it seems likely that the current economic decline may be made worse. General experience in the U.S. and elsewhere has shown that potential adverse employment effects of minimum wage increases can be masked or

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

offset to some degree by an expanding economy that is generating net employment growth. In a declining economy, any adverse effects on employment will not be offset.

One indicator of the potential labor market impact of increases in the minimum wage is the proportion of employees affected. Data from the CNMI 2004 household and expenditure survey show that 68.2 percent of wage earners in the CNMI earned no more than \$4.99 per hour and that 79.5 percent earned no more than \$7.99 per hour. Therefore, the scheduled increase in the minimum wage to \$7.25 (by 2015) will likely affect at least 75 percent of wage and salary workers in the CNMI. By comparison, in the mainland U.S. the 75th percentile mark is \$16.50 for wage and salary workers who are paid hourly rates.

Because the CNMI has such a large proportion of temporary, non-citizen workers in its labor force, it is likely that future job losses will cause non-citizen temporary workers who lose their jobs to return to their countries of origin or look for work elsewhere. This would contribute to the trend of declining population that has been evident since 2000. Because citizens of CNMI are U.S. citizens, they have access to the U.S. labor markets, including Guam, Hawaii and the U.S. mainland. It is possible that movements of workers from the CNMI into these U.S. labor market areas may increase as the minimum wage schedule for the CNMI is implemented. This could lead to additional population declines in the CNMI.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Section 1. Introduction

Public Law 110-28, the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007, (May 25, 2007) amended the minimum wage provision of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. §201 et seq.), raising the Federal minimum wage from \$5.15 per hour to \$7.25 per hour in three increments over two years. In addition, the legislation specified that the minimum wage rates applicable in the jurisdiction of American Samoa be increased in fifty-cent-per-hour increments beginning July 24, 2007 and annually thereafter on May 25 until the amounts reach conformity with the U.S. In the jurisdiction of CNMI, the applicable minimum wage is specified to increase in fifty-cent-per-hour increments beginning July 25, 2007 and annually thereafter on May 26 until reaching conformity with the U.S. Federal minimum wage amount (currently \$5.85 per hour and scheduled to increase to \$6.55 per hour as of July 24, 2008 and \$7.25 per hour as of July 24, 2009). The legislation also required the Secretary of Labor to prepare a report describing the observed impacts of the increases to the minimum wages of American Samoa and the CNMI on the local economies of the islands and projecting likely future impacts.¹ This report is in response to that requirement.

This report was prepared under the supervision of Leon R. Sequeira, Assistant Secretary for Policy, and Deb Misir and Susan Howe, Deputy Assistant Secretaries for Policy, by Ronald E. Bird, Ph.D., Chief Economist of the U.S. Department of Labor, with assistance from Jay Berman, James Carter, David Langdon, Regina Powers, and Mary Ziegler of the Office of the Assistant Secretary for Policy and Mario Distasio of the Employment Standards Administration. The U.S. Department of Interior, Office of Insular Affairs, provided generous and valuable assistance to facilitate the identification, compilation and interpretation of relevant data sources. The staff of the Government

¹Public Law No. 110-28, sec. 8104, 121 Stat. 112, 189 (2007).

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Accountability Office provided useful suggestions regarding information sources based on their contemporaneous research regarding other economic issues affecting CNMI. The Honorable Benigno R. Fitial, Governor of the Commonwealth of the Northern Mariana Islands, and the Honorable Togiola T.A. Tulafono, Governor of American Samoa, generously directed their staffs to provide available information and access to knowledgeable sources to fulfill the information needs of the DOL research team. The Honorable Congressman Faleomavaega of American Samoa and his staff also provided valuable assistance. Extensive interviews were conducted with persons knowledgeable regarding the economies of CNMI and American Samoa. In total, 26 interviews were conducted regarding the recent economic trends, current conditions and available data sources. The DOL research team also reviewed the extensive academic research literature regarding the economic impact of minimum wage regulations in the United States to identify information that could be applicable to consideration of the economic impact of minimum wage increases scheduled for American Samoa and the Commonwealth of the Northern Mariana Islands.

This report is limited to addressing the two issues contained in the Congressional mandate: (1) the impact on living standards and employment to the present date of the fifty-cent-per-hour increase in the minimum wages that became effective July 24, 2007 in American Samoa and July 25, 2007 in the CNMI; and (2) the projected impacts of the future increases scheduled under the legislation.

The Department's research was limited by two significant factors:

1. **Short Time Frame.** The reporting time-frame specified in the legislation – no later than 8 months from the date of enactment (May 25, 2007) – did not provide sufficient time to observe actual effects of the minimum wage increases. The initial increases of fifty cents per hour went into effect on July 24, 2007 in American Samoa and July 25,

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

2007 in the CNMI. The specified delivery date for this report was January 25, 2008. The period following the initial increase was too short for significant observable effects to materialize. Adjustments of employment arrangements and of patterns of living standards typically do not occur instantaneously following a change in a key economic parameter. Immediate changes may be too small in scale to observe, and it may require the passage of many months before cumulative effects become large enough to observe. In particular, a lack of significant observed adverse employment effects in the months since the initial increase is not indicative that such effects will not emerge in the future – especially as subsequent increases are implemented over time.

2. Lack of timely labor market data. The Bureau of Labor Statistics (BLS) does not collect monthly (or other period) data describing labor market conditions in either American Samoa or the CNMI. In contrast, the monthly survey of employers in the rest of the United States (the BLS Current Employment Statistics program) provides detailed monthly information by industry sector regarding the total level of payroll employment, payroll hours of production and non-supervisory workers, and hourly and weekly earnings of production and non-supervisory workers. This survey provides national estimates as well as estimates for all 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and over 400 metropolitan areas and divisions. The monthly survey of households (the Current Population Survey (CPS), a joint program of BLS and the Census Bureau) provides detailed national estimates of labor force participation, employment and unemployment. The CPS also collects data on wage and salary workers' median usual weekly earnings and publishes quarterly earnings estimates. Both surveys have been important sources of data for research regarding the impact of minimum wage increases in the United States over the past fifty years. The lack of such data for American Samoa and the CNMI significantly impairs efforts

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

to measure or to project the impacts of scheduled minimum wage increases for these territories.

It was not feasible to conduct field investigations in connection with this study. Had there been time and resources to conduct survey data collection in the field, travel by the research team to the islands could have been useful. However, meaningful field observations would have required data collection from both employers and households over many successive months in order to discern effects of the initial and subsequently scheduled minimum wage increases. In addition, a systematic data collection effort would have required approval of a survey under the terms of the Paperwork Reduction Act. Given the short reporting timeframe, design and implementation of field surveys were not practical.

This report is comprised of two subsequent sections. Section Two includes: (a) a summary of the economic situation of American Samoa prior to the initial scheduled minimum wage increase; (b) a discussion of possible impacts observed since the implementation of the initial fifty-cent increase in the minimum wages since July 24, 2007 in American Samoa; and (c) a discussion of projections of possible future impacts. Section Three comprises a similar discussion regarding the CNMI.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Section 2. American Samoa

American Samoa, the only U.S. territory south of the equator, lies 2,300 miles south of Hawaii and 1,600 miles northeast of New Zealand. American Samoa consists of seven islands which together make up 76.1 square miles of land (48,767 acres). The largest island, Tutuila, constitutes 70 percent of total land area and is home to 90 percent of the population. Pago Pago on Tutuila is the seat of the American Samoa Government and the site of one of the Pacific's great natural harbors.²

The high volcanic islands of American Samoa have rugged interiors mostly covered with rain forests. Some of the smaller islands exhibit unique geological formations. The north side of Tutuila and parts of the two outer islands, Tau and Ofu, make up an ecosystem considered so suitable a candidate for preservation that in 1988 the U.S. National Park Service identified it as the newest addition to the U.S. national park system.

Location of the Samoan Islands in the path of the southwest trade winds means frequent rains and a tropical climate. Year-round temperatures range from 70 to 90 degrees depending on the warmth of the surrounding ocean. Humidity averages about 80 percent throughout the year and rainfall averages 200 inches, with a December-March heavy rainy season. Frequent rain results in lush vegetation on most of the islands.

The mountainous terrain and heavy annual rainfall have important implications for agriculture and the domestic food supply. The soil of the slopes is thin as a result of leaching and can only support jungle vegetation. The soil in the valleys and on the plains is fertile and suitable for growing tropical fruits and vegetables, but commercial agricultural development has been constrained by the scarce supply of level land for which there are many competing uses.

² Descriptive information in this section was provided by U.S. Department of Interior, Office of Insular Affairs, December 2007.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

The largest area of level land is located on the Tafuna Plain on Tutuila, near the American Samoa International Airport. This is also the area that is most suitable for the development of housing and industry. It is likely that further development of industry, including tourism and with it any need to expand the airport to accommodate wide-bodied aircraft, will increase the industrial demand for land around the airport. Such developments would place commercial agricultural production at a serious disadvantage in terms of return to landowners.

Level land on the island of Tau, a part of which is included in the National Park of American Samoa, is somewhat far from the commercial markets in Pago Pago and is not used for commercial agriculture. As a result, most agricultural production is for home consumption. Of the 1,126 farms in American Samoa in 1990, 88 percent produced solely for subsistence. The most common crop is the taro root, followed by bananas, breadfruit, and coconuts. Fish are abundant in Samoan waters, but most meat and a number of other foods are imported, as is generally the case in the American-affiliated Pacific Islands.

As a small group in the Samoan Archipelago, the seven islands of American Samoa had no history distinct from that of the western islands of Samoa until the end of the 19th century. European traders began to call at Samoan ports around 1800, and some began to settle in the islands in the early 1800s. The first missionaries settled in 1830. By the late 1800s, internal strife among the chiefs and power struggles among major powers of Germany, Britain and the United States led to a period of instability in Samoa. In 1899, after the signing of a treaty by the three major powers, Germany annexed western Samoa (now Independent State of Samoa). The eastern islands (American Samoa) were ceded to the United States the following year.

When the United States acquired American Samoa in 1900, its interest in the eastern end of the Samoan archipelago was mainly military. Pago Pago harbor, one of the deepest natural harbors

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

in the South Pacific, was seen to be of value in the early part of the century as a coaling station for American ships. As a result, the territory was placed under the U.S. Navy which controlled access to it and appointed its governor until 1951. An Executive Order transferred authority over the territory to the Department of the Interior in 1951, paving the way to civilian rule and self-government.

In 1960, a constitution drafted by the American Samoan people and approved by the Department of the Interior established a government resembling that of a U.S. state. Until 1977, the governor and lieutenant governor were appointed by the Secretary of the Interior. American Samoan voters elected their first governor and lieutenant governor in November 1977.

American Samoa is an unincorporated and unorganized territory of the United States, so that not all provisions of the U.S. Constitution apply in the territory. Residents of American Samoa are not U.S. citizens. Rather, they are U.S. nationals, who can freely enter the United States and work and reside anywhere they choose. Legislation passed by the U.S. Congress recently subjected American Samoa's minimum wage rules to national standards, with provisions for a gradual increase in the minimum wage rate until it equals the U.S. minimum at the end of a multi-year period. But American Samoa retains control over its immigration, and entry to American Samoa by foreigners is not entry into the United States (in contrast to Guam, for example, where U.S. immigration laws apply). Goods produced in American Samoa may be exported to the United States duty-free, provided minimum standards of local labor content are met.

Demography

The population of American Samoa is estimated to be 68,200 (July 2007).³ The population increased by 13,200 between 1997 and 2007 – an increase of 24 percent over the decade. Population

³ American Samoa Department of Commerce, <http://www.asdoc.info/>.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

growth has largely been the result of natural increase. The population is quite young, on average. The median age was 21.3 years according to the 2000 Census, and 38.7 percent of the population was younger than 15 years of age.⁴ Applying this proportion to the 2007 estimated population total suggests a current population of 26,393 under age 15 and 41,807 ages 15 or older.

Immigrants are a significant factor in the demographics of American Samoa. According to the 2000 Census, the population age 15 and older (35,079) was comprised of 39.1 percent native born American Samoans and 60.9 percent were individuals born elsewhere.⁵ The majority of non-native American Samoans are migrants from the neighboring islands of the Independent State of Samoa to the west. Despite the large proportion of immigrants in the total population, American Samoa reported net out-migration of 4,993 during the decade of the 1990s.

This demographic pattern (net out-migration combined with a large immigrant population) may reflect, in part, the fact that native born American Samoans have the right (as U.S. nationals) to migrate to the U.S. Thus, the inward migration from the Western Samoa islands and from elsewhere is more than offset by migration of native-born American Samoans to the United States. The relatively high fertility rates of the remaining native and the immigrant populations offset the net out-migration of native adults and contribute toward positive population growth of more than 2 percent per year. It is estimated by informed observers that approximately half of native-born American Samoans now live in the United States, primarily in Hawaii and California.⁶

⁴ Census 2000 American Samoa Summary File. Data also are available in the Statistical Yearbook 2006 published by the American Samoa Department of Commerce. See page 4.

⁵ Census 2000 American Samoa Summary File. Data also are available in the Statistical Yearbook 2006 published by the American Samoa Department of Commerce. See page 1 and Table 1.16.

⁶ Based on interviews conducted for this report.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Economic Structure and Conditions

Timely and detailed economic information about American Samoa is scarce. In recent years, the American Samoa Government (ASG) has attempted to compile economic and labor force statistics, but estimates are generally available 12 months or more after the close of the calendar year. American Samoa is included in the decennial U.S. Census and in the quinquennial Economic Censuses, conducted in every year ending in “2” and “7.”

One important source of information on the American Samoan economy and the labor market has been the biennial surveys conducted by the U.S. Department of Labor’s Employment Standards Administration (Wage and Hour Division) which have looked at the economy in relation to industry wage rates applicable in American Samoa under the Fair Labor Standards Act (FLSA).⁷ These surveys were conducted in support of the biennial special industry committee process that previously made recommendations to set and adjust industry-specific minimum wages in American Samoa. Passage of P.L. 110-28 in 2007 replaced the minimum wage industry committee process with a fixed schedule of increases that will bring the minimum wages across all industries into uniformity and conformity with the U.S. minimum wage of \$7.25. Consequently, the biennial labor market surveys will no longer be conducted.

American Samoa is not included in the annual American Community Survey (ACS) conducted by the U.S. Census, nor is it included in the monthly CPS conducted by the U.S. Census, nor in the Current Employment Statistics program surveys conducted monthly by the U.S. Bureau of Labor Statistics. No monthly or quarterly economic or labor market surveys are conducted by the American Samoa government. The lack of an unemployment insurance system in American

⁷ Former Section 8 of the FLSA (29 U.S.C. §208), which was deleted by P.L. 110-28, set forth the procedures for the biennial industry committee and the process by which the committee made recommendations to the Secretary of Labor on industry wage rates.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Samoa further limits the availability of timely information on conditions and changing trends affecting the labor market.

American Samoa is a small developing economy, dependent on two primary externally funded income sources: ASG, which receives significant operational and capital grants from the Federal government (\$117 million of \$182 million total government revenue in FY 2005⁸), and the two tuna canneries (operated by StarKist, a subsidiary of Del Monte, and by Chicken of the Sea, a subsidiary of Thai Union Frozen Products of Bangkok) on the main island of Tutuila. Tuna exports in 2006 totaled 20.7 million cases (about 147 thousand tons) valued at \$431.5 million.⁹ Taxes and fees paid by the tuna canneries are another significant source of revenue for the government. These two primary income sources support a third economic sector, a services sector that derives from and complements the first two.

In 2006, total employment in American Samoa was 17,395, little changed from 17,344 persons in 2005.¹⁰ The American Samoa government accounted for 5,894 workers, or 33.9 percent of total employment, followed by the two canneries with 4,757 workers, or 27.3 percent, and the rest of the economy with 6,744 workers, or 38.8 percent of total employment.

Data from the Census 2000 showed the labor force to be 17,627 and the number of employed persons to be 16,718 – implying an unemployment rate of 5.2 percent. By comparison, the comparable U.S. unemployment rate as derived from the Census 2000 was 5.8 percent in 2000.¹¹

⁸ American Samoa Department of Commerce, Statistical Yearbook 2006, p. 135.

⁹ Information provided by American Samoa Department of Commerce.

¹⁰ American Samoa Department of Commerce, Statistical Yearbook 2006, p. 138.

¹¹ The official unemployment rate for the United States is estimated from the Current Population Survey and was 4.0 percent in 2000. The differences between the 5.8 percent estimate derived from the Census 2000 and the official 4.0 percent figure derived from the CPS reflect conceptual and methodological differences between the two programs. For a general discussion of these differences, see www.bls.gov/lau/censusdiff.htm.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Data on the labor force and unemployment rate in American Samoa for more recent years are not available.¹²

American Samoa's major export is canned tuna. Other manufacturing and industrial assembly is limited. A large proportion of the territory's workforce (in the case of the canneries as much as 90 percent) is from the western islands of the Independent State of Samoa and other neighboring countries.¹³ But while it is true that Samoans from the Independent State of Samoa working in the territory are legally alien workers, they are in fact no different than the American Samoans by culture, by history and by family ties.

The services segment of the economy, aside from government services and canneries, is mostly trade, both wholesale and retail. The opening a decade ago of the first big box retailer, Cost U Less, brought "wholesale retailing" to American Samoa, and a Hawaii-based operator brought the territory its first movie theatre.

Economic Significance of the American Samoa government (ASG)

The government is American Samoa's single largest employer. In 2006, the 5,894 government workers accounted for 33.9 percent of total employment in American Samoa. ASG is a unitary government with no local or municipal government sublevels. As such, it is highly centralized and performs all basic government functions. Aside from the usual government work, ASG also manages power, water and sewer systems through the American Samoa Power Authority (ASPA).

¹² The Economic Report prepared for the 2007 special industry committee cites labor force for 2005 as 17,344, but cites no estimate for employment (U.S. Department of Labor, Economic Report: The Minimum Wage in American Samoa, 2007, Washington: May 2007, p. 14, Table IIB). The American Samoa Department of Commerce, Statistical Yearbook, 2006, cites total employment of 17,344 for 2005 (p. 138). Only if all labor force participants were employed (implying 0.0 percent unemployment in 2005) could both citations be accurate.

¹³ Based on interviews conducted with industry representative for this report.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

In FY 2005, the government reported revenues of \$182.0 million and expenditures of \$192.0 million. U.S. Federal grants and assistance accounted for 64 percent of revenue. Local revenue collection totaled \$63.6 million. The largest categories of government expenditure were “Health, Welfare, Education and Culture,” at \$65.9 million, “General Government,” at \$45.6 million, and “Health and Recreation,” at \$31.9 million.

In 2006, the government sector minimum wage increased to \$2.91 per hour. The wage survey that year (in preparation for the planned 2007 special industry committee) showed that, among government sector workers covered by the FLSA, less than 1 percent earned at the minimum rate and 10 percent earned at or below \$4.05 per hour.¹⁴ Among government workers covered by the FLSA, 34 percent earned no more than \$5.15 per hour and 48 percent earned no more than \$6.15 per hour. The average hourly wage of covered government sector workers in 2006 was \$7.49 per hour, and the average annual earnings of government workers were \$28,351.

Table 1 shows that the scheduled minimum wage increases mandated by P.L. 110-28 will bring the minimum wage for covered ASG workers to \$7.25 per hour by 2015. Paying for the increases in government worker minimum wages will present a significant challenge to ASG. While available data are insufficient to make an exact computation, the fact that 48 percent of covered government workers earned less than or equal to \$6.15 per hour prior to the scheduled minimum wage increase suggests that at least half of covered government employees will be affected by the time that the adjustment schedule reaches \$7.25 per hour. Based on the 2006 wage survey, 1,293 covered government employees who previously earned no more than \$5.25 per hour will be entitled to hourly increases of \$2.00 or more. Assuming 2,000 hours of work per year for full-time workers, these increases imply at least \$5.2 million per year in increased wage costs for ASG. Wage increases

¹⁴ U.S. Department of Labor, Economic Report: The Minimum Wage in American Samoa, 2007, Washington: May 2007, p. 112.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

attributed to government employees earning between \$5.25 and \$7.25 per hour before the first wage increase could result in an additional \$2 million or more in annual wage costs when the full increase schedule takes effect. These increases may force ASG to make difficult choices between reducing government payrolls, reducing available hours of paid work, raising taxes or cutting non-wage expenditures.

Industry	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bottling, Brewing and Dairy	\$3.19	\$3.69	\$4.19	\$4.69	\$5.19	\$5.69	\$6.19	\$6.69	\$7.19	\$7.25	\$7.25
Construction	3.60	4.10	4.60	5.10	5.60	6.10	6.60	7.10	7.25	7.25	7.25
Finance & Insurance	3.99	4.49	4.99	5.49	5.99	6.49	6.99	7.25	7.25	7.25	7.25
Fish Canning and Processing	3.26	3.76	4.26	4.76	5.26	5.76	6.26	6.76	7.25	7.25	7.25
Government	2.91	3.41	3.91	4.41	4.91	5.41	5.91	6.41	6.91	7.25	7.25
Hotel	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.25	7.25
Miscellaneous	2.70	3.20	3.70	4.20	4.70	5.20	5.70	6.20	6.70	7.20	7.25
Petroleum Marketing	3.85	4.35	4.85	5.35	5.85	6.35	6.85	7.25	7.25	7.25	7.25
Printing	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.25	7.25	7.25
Private Hospital and Education	3.33	3.83	4.33	4.83	5.33	5.83	6.33	6.83	7.25	7.25	7.25
Publishing	3.63	4.13	4.63	5.13	5.63	6.13	6.63	7.13	7.25	7.25	7.25
Retail, Wholesale & Warehousing	3.10	3.60	4.10	4.60	5.10	5.60	6.10	6.60	7.10	7.25	7.25
Shipping and Transportation A	4.09	4.59	5.09	5.59	6.09	6.59	7.09	7.25	7.25	7.25	7.25
Shipping and Transportation B	3.92	4.42	4.92	5.42	5.92	6.42	6.92	7.25	7.25	7.25	7.25
Shipping and Transportation C	3.88	4.38	4.88	5.38	5.88	6.38	6.88	7.25	7.25	7.25	7.25
Tour and Travel Service	3.48	3.98	4.48	4.98	5.48	5.98	6.48	6.98	7.25	7.25	7.25
Ship Maintenance	3.51	4.01	4.51	5.01	5.51	6.01	6.51	7.01	7.25	7.25	7.25
Garment Manufacturing	2.68	3.18	3.68	4.18	4.68	5.18	5.68	6.18	6.68	7.18	7.25

*Minimum wage increases are legislated to occur on May 25 of each year.
Source: Employment Standards Administration and Office of the Assistant Secretary for Policy.

Table 1 shows that the scheduled fifty-cent per year minimum wage increases will bring the Finance and Insurance industry, the Petroleum Marketing industry, and the three sectors of the Shipping and Transportation industry into conformity with the U.S. minimum wage in 2013. All

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

industries except Garment Manufacturing (which currently has no workers in this category) and the Miscellaneous category will reach parity with the U.S. minimum wage by 2014.

A Large Proportion of Workers Will Be Affected by Minimum Wage Increases

The proportion of total workers who will be affected by the scheduled minimum wage increases is a consideration for assessing the likelihood of negative employment effects either in terms of job elimination or reductions in normal paid hours. The 2006 wage survey suggested that 10,195 (58.8 percent) of American Samoa's 17,344 workers were covered by the FLSA and potentially subject to minimum wage provisions. Overall, covered workers in 2006 had average hourly earnings of \$5.26 per hour – almost \$2.00 per hour less than the \$7.25 per hour minimum wage scheduled to become effective over the next five years. Raising the average hourly wages by nearly \$2.00 per hour for the 10,195 covered workers could result in an increased wage bill of \$40 million per year across all American Samoa industry sectors. Based on the \$120 million annual payroll across all American Samoa industries reported by the 2002 Economic Census, this would represent a 33 percent increase in wage costs.¹⁵ General economic experience suggests that it is not likely that such an increase in wages could be absorbed through increased productivity, reduced profits, or higher prices passed along to consumers.

Table 2 shows the proportions of covered workers in each industry who earned no more than a specified amount based on the 2006 wage survey. In each case, the specified cut-off amount is less than \$7.25 per hour. Altogether, 7,856 covered workers (77.8 percent) earned less than \$7.25 per hour and so will be entitled to an increase as the minimum wage in American Samoa increases to \$7.25 per hour. In order to sweep within its direct effect a proportion similar to the 77.8 percent of

¹⁵ A Census Bureau reviewer noted that this analysis combined data from the 2002 Economic Census with data from other sources. The use of multiple data sources may affect the precision of the estimates 33 percent increase in wage costs; nonetheless, the actual increase in wage costs would be considerable.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

workers affected by the American Samoa minimum wage increase schedule, the U.S. minimum wage would need to be raised to more than \$16.50 per hour.¹⁶

Table 2. Distribution of hourly wages among FLSA covered workers in American Samoa, 2006

Industry	Total workers covered by FLSA	Average wages	Cut Point (\$ per hour)	Workers earning less than cut point	Percent of workers earning at or below specified cut point
Bottling, Brewing and Dairy	31	\$3.50	\$5.25	31	100%
Construction	128	5.37	6.55	113	88%
Finance & Insurance	172	8.59	6.75	91	53%
Fish Canning and Processing	4,651	3.60	6.25	4,558	98%
Government	3,783	7.49	6.15	1,816	48%
Hotel	124	4.09	5.55	109	88%
Miscellaneous	131	4.70	5.25	106	81%
Petroleum Marketing	6	7.41	6.75	2	33%
Printing	11	4.52	6.25	10	91%
Private Hospital and Education	10	3.60	3.25	10	100%
Publishing	5	4.20	5.05	5	100%
Retail, Wholesale & Warehousing	964	4.26	5.95	839	87%
Shipping and Transportation A	77	4.68	6.95	73	95%
Shipping and Transportation B	27	4.84	6.25	23	85%
Shipping and Transportation C	69	5.66	6.65	64	93%
Tour and Travel Service	6	6.71	6.25	6	100%
All FLSA Covered Workers	10,195	5.26		7,856	77%

Source: U.S. Department of Labor, 2006 wage survey conducted for the American Samoa Industry Committee No. 27.

¹⁶ The data reflect analysis by the Office of the Assistant Secretary for Policy of unpublished tabulations from the Bureau of Labor Statistics of hourly earning of employed wage and salary workers in the U.S. who are paid hourly rates for 2006 (annual averages). Among 76.5 million workers across both private and public sectors, 75 percent earned less than or equal to \$16.50 per hour, and 90 percent earned less than or equal to \$23.40 per hour. The median (50th percentile) was \$11.75 per hour. The BLS tabulation found that 10 percent of this category of U.S. workers earned less than \$7.00 per hour in 2006. The category of workers tabulated by BLS corresponds closely with the group of workers covered by the FLSA minimum wage provisions.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Tuna Processing

American Samoa's exclusive economic zone does not encompass the great migratory routes of the Pacific tuna, but the excellence of the harbor at Pago Pago has given the territory a natural advantage in landing fish for processing. In addition to the unique attributes of the harbor and the applicability of a lower minimum wage, three special provisions of U.S. law formed the basis for tuna processing, American Samoa's largest private industry, now more than 50 years old: (1) the territory is exempt from the Nicholson Act which prohibits foreign ships from landing their catches in U.S. ports; (2) American Samoan products with less than 50 percent market value from foreign sources enter the United States duty-free (General Note 3(a) of the U.S. Tariff Schedule); and (3) the parent companies of American Samoa's fish processing plants have enjoyed special tax benefits.

The tuna industry throughout the Pacific is in flux, and its future in American Samoa is widely believed to depend on a continued mix of duty-free status, special tax benefits, and other credits and a viable wage rate, as well as on continued use of the harbor by fishing vessels taking their catches in other parts of the ocean. Changing requirements for landing of catch by other Pacific island-states could mean fewer fish for the American Samoan canneries. Regional and global trade rules involving the United States also have the potential effect of altering the financial arrangements under which the canneries operate. Moreover, low labor costs in most of Central America and Asia make for serious pressure from foreign competition.

Since 1955, the tuna canning industry in American Samoa has not been subject to the standard U.S. minimum wage established under the FLSA. Instead, minimum wages unique to American Samoa have been set based on recommendations of biennial industry committees. The latest committee (2005) set the minimum wage for the tuna processing industry at \$3.26 per hour (unchanged since 2001). By comparison, the U.S. minimum wage was \$5.15 during the same period,

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

was raised to \$5.85 per hour on July 24, 2007, and is scheduled to rise to \$6.55 as of July 24, 2008 and \$7.25 per hour as of July 24, 2009. Under the terms of P.L. 110-28, the minimum wage applicable to the tuna canning industry in American Samoa increased to \$3.76 per hour on July 24, 2007 and will increase in fifty cent increments each May 25 thereafter until parity with the U.S. minimum wage of \$7.25 per hour is reached.

A recent study of the American Samoa economy and of the impact of the tuna industry on American Samoa found that growth of the tuna processing industry has been the primary driver of economic growth and stability for the islands over the past thirty years:

Between 1975 and 2005, fish processing increased its workforce by 3,246. This was nearly three times the 1,103 jobs added in government and the authorities because of increased federal support. In 2005, the canneries accounted for 26.2 percent of total employment, while employment in government and the authorities supported by federal grants accounted for 18.9 percent.¹⁷

The study, conducted by McPhee and Associates, also pointed out the concern that increasing minimum wages could result in closure of the tuna canneries:

But legislated increases in the minimum wage could erode the competitiveness of the tuna canneries, one of the mainstays of the island economy. If the fish processing industry were forced to shut down, the damage to the American Samoa economy would be severe and widespread.¹⁸

Table 3 summarizes the growth of the structure of the American Samoa economy described in the McPhee and Associates report. Over the past 30 years, direct employment growth in the fish processing industry has accounted for 34.3 percent of total job growth. In recent years, however, growth in the canning operation has slowed as new types of tuna packaging have gained market share.

¹⁷ From a forthcoming report prepared for the Department of Commerce, American Samoa government by Malcolm D. McPhee & Assoc. (with Dick Conway and Lewis Wolman), *"American Samoa's Economic Future and the Cannery Industry"* (Funded by: The U.S. Department of the Interior, Office of Insular Affairs), p. 3.

¹⁸ *Ibid.*, p. 1.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Table 3. American Samoa employment, 1975-2005¹⁹

	1975	Percent of Total	2005	Percent of Total	Change 1975-05	Percent of Total
Basic employment*	3,879	49.2	8,428	48.6	4,549	48.1
Fish processing	1,300	16.5	4,546	26.2	3,246	34.3
Government**	2,179	27.7	3,282	18.9	1,103	11.7
Other	400	5.1	600	3.5	200	2.1
Nonbasic employment	3,999	50.8	8,916	51.4	4,917	51.9
Total employment	7,878	100	17,344	100	9,466	100

* The authors define basic employment as employment in activities, such as exporting, that bring money into the economy. Basic activity in America Samoa takes several forms, including tuna exports, tourism, and federal financial aid. Nonbasic employment is in activities, principally trade, services, and local government, which are supported by money derived from basic activities

** American Samoa government and authorities supported by Federal grants.

Potential Employment Impact of Closure of the American Samoa Tuna Canneries

As this report is being prepared, the two tuna canneries in American Samoa continue in operation. Neither plant has reduced output or working hours in immediate response to the first fifty-cent increase in the minimum wage, although both companies have stated that they may do so in the future.²⁰ Despite the lack of immediate effects, there appears to be genuine cause for concern that, at some point before the escalation to \$7.25 per hour is reached, the rising minimum wage combined with other factors may lead to the closing of both canneries in American Samoa.

For both companies, profitability is marginal. Del Monte, the owner of the StarKist cannery, reported disappointing overall corporate performance for the third quarter of 2007, and in the discussion of financial results, the corporate CEO referenced poor profitability of the seafood business line as a contributing factor.²¹ In response to questions regarding whether the initial fifty-cent increase in the minimum wage had contributed to any change in absenteeism or turnover costs,

¹⁹ Ibid., p. 3.

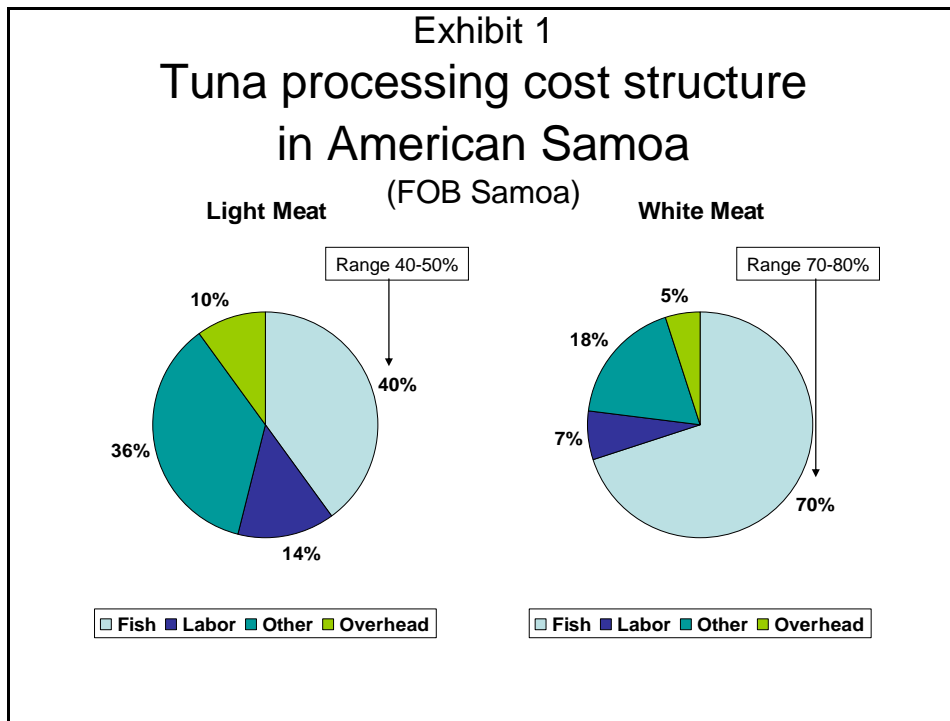
²⁰ Based on interviews conducted with industry representatives for this report.

²¹ Based on interviews conducted for this report.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

industry representatives presented absenteeism records showing no change in absenteeism from a year ago.

Exhibit 1 shows the structure of tuna processing costs for the American Samoa canneries.²² The largest component of the cost of product shipped from American Samoa is the fish itself, ranging from 40 percent to 70 percent of cost, depending on the type of fish being processed. Labor ranges from 7 percent to 14 percent of cost. Industry representatives claim that the increase of the minimum wage from the \$3.26 per hour rate effective prior to July 24, 2007 to the \$7.25 per hour rate (a 2.2 times increase) would more than double current labor costs for their facility (where most workers are now paid at the existing minimum wage rate) and would more than erase the current profit margin.



When asked how quickly a decision could be implemented to transfer production to tuna canning facilities elsewhere, one industry spokesman replied, “Minutes.” It was explained that his

²² The exhibit was prepared and provided by an industry representative.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

and other companies already outsource significant production to Thailand and to South American countries (both for the U. S. market and for other countries). The industry representative stated that there are forty canneries in Thailand, and that nothing would have to be built or moved. To implement a production transfer, the companies would simply place more orders with existing plants. Reference was made to the fact that there is excess processing capacity worldwide in the tuna canning industry.²³ It has been reported that the world tuna processing has an excess of production capacity on the order of 20 to 40 percent.²⁴

Research reports have highlighted the vulnerability for the past decade of the American Samoa tuna processing industry to competition from Thailand, South American countries, New Guinea and other low cost producers.²⁵ Under the North American Free Trade Agreement, tuna canned in Mexico has tariff-free access to the U.S. market as of January 1, 2008. The shorter transportation route and lower labor costs expected from Mexico will further challenge the viability of the American Samoa tuna processing industry.

Both tuna processing companies reported that the growth in the tuna products market is now focused on the sealed foil packages of tuna or tuna-based entrees rather than the traditional canned tuna. Both companies reported in separate interviews that canned tuna demand is highly price sensitive: The product was described as a “commodity” with little or no brand loyalty.

The McPhee and Associates report prepared for the American Samoa Department of Commerce updated estimates of input-output model parameters describing the impact on the overall economy of changes in basic industry sectors. Basic industry sectors are the components of

²³ Based on interviews conducted with industry representatives for this report.

²⁴ See statement at http://www.house.gov/list/press/as00_faleomavaega/eniwtcstatement.html which cites a 40 percent excess capacity. Interviews with company representatives mentioned a 20 to 40 percent excess.

²⁵ Michael Hamnett and William Pintz, “The Contribution of Tuna Fishing and Transshipment to the Economies of American Samoa, the Commonwealth of the Northern Mariana Islands and Guam,” University of Hawaii Institute for Marine and Atmospheric Research, Pelagic Fisheries Research Program, 1996, p. 3.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

a local economic region that produce goods and services for export to other economies. The tuna processing industry is the primary private sector industry in the American Samoa economy. In addition to the direct employment effect of this industry and the resulting income provided by the tuna processing industry, this basic sector has an indirect multiplier effect on other sectors as a result of workers spending income generated in the basic sector. The total economic impact of the sector is the sum of its direct and indirect effects. Table 4 presents the results in terms of direct and total economic impacts of the tuna processing industry on the economy of American Samoa.

The McPhee and Associates analysis of input-output model data derived an implicit multiplier effect of 1.47. This means that every job added to or subtracted from the economy by a change in employment in the tuna processing industry adds or subtracts another 0.47 jobs from other sectors of the economy. The model predicts that closure of the two canneries would eliminate in total 7,825 jobs from the American Samoa economy. This impact would amount to elimination of 44 percent of all employment in American Samoa. The remaining economy would depend almost exclusively on transfers from the U.S. Federal government to provide basic sector infusion of purchasing power to the economy.²⁶

The input-output model does not take into account the fact that electricity prices and shipping costs for the tuna industry are, in effect, subsidized because of the arrival of cargo ships, which bring fuel and other goods to the islands and take processed tuna. Closure of the canneries would increase the cost of importing fuel (for electrical generation and other uses) and other goods.²⁷

²⁶ The full report by McPhee and Associates is expected to be published in late January 2008.

²⁷ Based on interviews conducted for this report.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Table 4. Fish processing impact on American Samoa Economy, 2002		
	Fish Processing Economic Impact	Percent of American Samoa
DIRECT IMPACT		
Output (mils.)	\$503.4	54.1
Exports (mils.)	\$438.3	97.6
Employment	5,538	31.1
Labor income (mils.)	\$49.4	17.3
TOTAL IMPACT		
Output (mils.)	\$603	64.9
Employment	8,118	45.6
Proprietors	293	27.7
Wage and salary employment	7,825	46.7
Agriculture, fishing, and mining	62	22.1
Construction	40	7.1
Manufacturing	5,494	99.0
Wholesale and retail trade	549	27.8
Transportation and warehousing	231	38.0
Financial activities	85	28.5
Services and government authorities	874	28.0
Government	490	11.3
Labor income (mils.)	\$87.6	30.7
Implied employment multiplier	1.47	---

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Section 3: The Commonwealth of the Northern Mariana Islands

The Commonwealth of the Northern Mariana Islands (CNMI) is the American territory closest to eastern Asia.²⁸ It is 1,500 miles from Japan, 1,400 miles from Taiwan, and 2,000 miles from Korea. The CNMI consists of 14 islands, with a total land area of 176.5 square miles, spread over 264,000 square miles of ocean. Only five of the islands are inhabited, and the largest, Saipan, accounts for over 90 percent of the population. The next two largest islands are Rota and Tinian, which between them nearly equally split the remaining 10 percent of the population. The smaller islands are not considered habitable by large populations.

The covenant that created the CNMI “in political union with and under the sovereignty of the United States of America” became law in 1978. Previously, the islands were administered by the United States under the terms of a United Nations territorial trusteeship. Citizens of the CNMI are U.S. citizens as well, although they do not vote in Federal elections and do not pay Federal taxes. Nor are they represented in the Congress of the United States. The Commonwealth receives the same types of general Federal aid as do states and other territories, some of them in the form of capital improvement and technical assistance grants. The Federal government also assists the Commonwealth in dealing with special issues, such as human trafficking and other human rights violations. CNMI residents enjoy the full protection of U.S. institutions. The covenant establishing the Commonwealth provided potential exemption or relaxation of some U.S. legal requirements affecting employment and immigration law:

Section 503. The following laws of the United States, presently inapplicable to the Trust Territory of the Pacific Islands, will not apply to the Northern Mariana Islands except in the manner and to the extent made applicable to them by the Congress by law after termination of the Trusteeship Agreement:
(a) except as otherwise provided in Section 506, the immigration and naturalization laws of the United States;

²⁸ Much of the information describing the physical, political and economic situation of CNMI in this section is based on materials and data provided by the Office of Insular Affairs, U.S. Department of the Interior and by the Office of the Governor of the Commonwealth of the Northern Mariana Islands.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

(b) except as otherwise provided in Subsection (b) of Section 502, the coastwise laws of the United States and any prohibition in the laws of the United States against foreign vessels landing fish or unfinished fish products in the United States; and
(c) the minimum wage provisions of Section 6, Act of June 25, 1938, 52 Stat. 1062, as amended.²⁹

The minimum wage in CNMI was set at \$3.05 per hour in 1996 when the U.S. minimum wage was \$4.75 per hour.³⁰ P.L. 110-28, which raises the U.S. minimum wage (in three steps) to \$7.25 per hour, specified an increase in the CNMI minimum wage to \$3.55 per hour effective July 25, 2007 and scheduled further increases of fifty cents per year to take effect May 26 of each subsequent year until parity with the U.S. minimum wage is reached.³¹ The schedule will result in the CNMI minimum wage rising to \$7.05 per hour on May 26, 2014 and to \$7.25 per hour on May 26, 2015. The Commonwealth has evolved economically, financially, and socially since its establishment in 1978. Per capita income rose from \$3,298 in 1980 to \$9,151 in 2000, a larger increase than was seen among other Pacific island nations.³² Despite absolute improvements, CNMI remains relatively poor by U.S. standards: per capita income remains less than one-third of U.S. per capita income. In 1980, the CNMI per capita income of \$3,298 was 32.5 percent of U.S. per capita income of \$10,134, and in 2000, the CNMI per capita income of \$9,151 was 30.7 percent of U.S. per capita income of \$29,855.³³ Along with economic development, the population grew from 16,780 in 1980 to 69,221 in 2000.

²⁹ 48 U.S.C. Section 1801.

³⁰ CNMI Public Law 9-73 increased the minimum wage to \$3.05 effective July 1, 1996. The Minimum Wage Increase Act of 1996 (Section 2104 of the Small Business Job Protection Act of 1996) raised the FLSA minimum wage from \$4.25 per hour to \$4.75 per hour effective October 1, 1996 and \$5.15 per hour effective September 1, 1997.

³¹ The implementation dates for CNMI and American Samoa vary by one day because of each area's position with respect to the international date line. Thus, the July 24, 2007 wage increase in American Samoa was effective July 25 in CNMI, and the future May 25 wage increases in American Samoa will be effective May 26 in CNMI.

³² For 2000 data, see U.S. Census Bureau, 2000 Population and Housing Profile: The Commonwealth of the Northern Mariana Islands, p. 4. For 1980 and 2000 data, see CNMI Yearbook 2002, Table 5.4.

³³ See www.census.gov/compendia/statab/tables/08s0657.xls for U.S. data.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

The Garment Industry

An important factor which contributed to economic development of CNMI in the 1980s and 1990s has been the ability to export locally manufactured goods tariff-free to U.S. markets. Combined with a low minimum wage and local immigration policies that facilitated entry of guest workers, CNMI developed a growing garment manufacturing industry that exported finished apparel to the U.S. and other markets. The garment industry in CNMI was able to compete with garment manufacturers in countries with lower wages than the CNMI minimum wage because of the advantage provided by tariff-free access to the U.S. market. During the period of expansion of the industry in CNMI, tariff barriers remained in effect for many of the lower-wage countries in Asia. The relatively higher minimum wage in CNMI (compared to wages in other Pacific islands, China, India, Nepal, Bangladesh, and elsewhere) served to attract foreign workers to temporary employment in the CNMI garment factories. Even though paid less than the U.S. minimum wage rate, foreign temporary workers in CNMI have been able to earn more money than if they worked in their home countries.

The expansion of the garment industry in CNMI had a significant impact on both the population and the labor force. The Commonwealth became the only Pacific island entity in which foreign-born residents (mostly temporary workers) outnumber indigenous residents. When the population reached 69,220 in 2000, temporary residents (mostly participants in the garment industry guest worker program) totaled 34,740, equal to 50.2 percent of the total population. By comparison, 24,820 (35.9 percent) had been born in CNMI, and 18,093 (26.1 percent) reported that their mothers had been born in CNMI. Table 5 summarizes CNMI population trends by citizenship status from 1980 through 2003.

Population growth in CNMI over the past 25 years has been paralleled by employment growth. Also according to the 2000 census, 42,753 persons, or 61.8 percent of the population, were

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

employed.³⁴ This employment-to-population proportion was higher than that for the average developing economy, and it is high even in comparison to large industrial economies where typically about half of the population is employed. The high employment-to-population ratio in CNMI reflects the fact that population growth has been predominantly driven by entry of working-age adults rather than by natural increase or immigration of families with children.

Citizenship	Number of Persons				
	1980	1990	1995	2000	2003
All Persons	16,780	43,345	58,846	69,221	63,419
U.S. Citizen	13,071	20,082	27,489	30,131	29,326
Resident Non-citizen	3,709	23,263	31,357	39,090	34,093
Permanent	---	2,188	3,405	4,350	3,756
Temporary	---	21,075	27,952	34,740	30,337

Source: Central Statistics Division, CNMI Census Reports, 2003 Community Survey

Of those employed, 40.7 percent (17,398 persons) were in manufacturing, mainly garment making, which has operated only on Saipan. Other industries that were represented among the employed, although with much smaller magnitude, were arts, entertainment, and recreation (second); retail trade (third), and construction (fourth). Public administration accounted for a relatively small share of employment (6.0 percent).

In 2000, CNMI employment totaled 8,620 U.S. citizens and 34,130 non-citizens—predominantly temporary workers employed in the garment and service industries. Non-citizens accounted for 88.8 percent of private sector wage and salary workers in 2000, an increase from 52.7 percent in 1980. Among citizens, the 8,620 employed in 2000 included 4,190 private sector wage

³⁴ The proportion is relative to the entire population not just the working-age population.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

and salary workers, 4,175 government workers, 235 self-employed persons and 35 unpaid family members.³⁵

Up-to-date and detailed data on employment and unemployment in CNMI are not available. Data from the 2000 Census showed that overall unemployment in CNMI that year was 3.8 percent, down from an estimated 7.3 percent in 1995. Among citizens, the unemployment rate was 11.1 percent and for non-citizens (predominantly temporary workers) the unemployment rate in 2000 was 1.8 percent.³⁶

Expansion of the CNMI garment industry peaked in 1999 with 34 factories in operation and sales of \$1.06 billion, according to the Saipan Garment Manufacturers Association (SGMA). Sales declined beginning in 2000 in response to increased competition from lower cost countries in Asia and elsewhere and to the 2001 recession in the United States. In 2003 there were 29 garment factories operating in CNMI. Global competition has intensified since 2005, when implementation of World Trade Organization (WTO) agreements liberalized trade in garments and textiles. Under the rules that took effect in January 2005, quotas disappeared for textiles, although import duties remained. The removal of quotas made it possible for producers of labor-intensive goods such as garments to sell more of their products in markets such as the United States, Europe, and Japan, even with import duties. Examples of countries that benefited from exports of labor-intensive goods are China and Mexico. With its entry to the WTO as a partner in the new global trade regime, China obtained better access to the WTO's high-income members and was expected to reciprocate with imports from these countries.

³⁵ CNMI Census Reports, *Recent Trends in Population, Labor Force, Employment, Unemployment and Wages, CNMI: 1980 to 2000*, reprinted in: U.S. Department of the Interior, *Commonwealth of the Northern Mariana Islands*, Unpublished briefing paper prepared by the Office of Insular Affairs, December 2007, p. 18.

³⁶ *Ibid.*, p. 15.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

Since the cost of labor in China is lower than in the CNMI, Chinese manufacturers can take advantage of economies of scale to sell more abroad.³⁷ In a global market of low unit cost and large volume advantage, small producers such as those in the CNMI, where production costs are higher than those in China, for example, are less able to compete. The Commonwealth's garment producers' costs are lower than in the United States but still higher than in China and Mexico.

Since implementation of garment and textile trade agreements in January 2005, increasing numbers of CNMI garment makers have exited or consolidated, especially the smaller producers who did not have the sales volumes to compensate for lower sales margins resulting from global competition and the subsequent lower prices. Remaining garment producers focused on attempts to improve productivity and to develop niche markets to remain viable in the face of global competition.³⁸ The decline in the number of garment factories has been mirrored in the decline of guest workers employed in the industry. Table 6 shows that work permits issued by the CNMI Department of Labor for garment industry guest workers declined from 16,639 in 2000 to 10,089 in 2006.³⁹

³⁷ See Lett, Erin and Judith Banister. "Labor costs of manufacturing employees in China: an update to 2003–04." *Monthly Labor Review*, November 2006.

³⁸ Information provided by CNMI business and government interviewees.

³⁹ Data from CNMI Department of Labor.

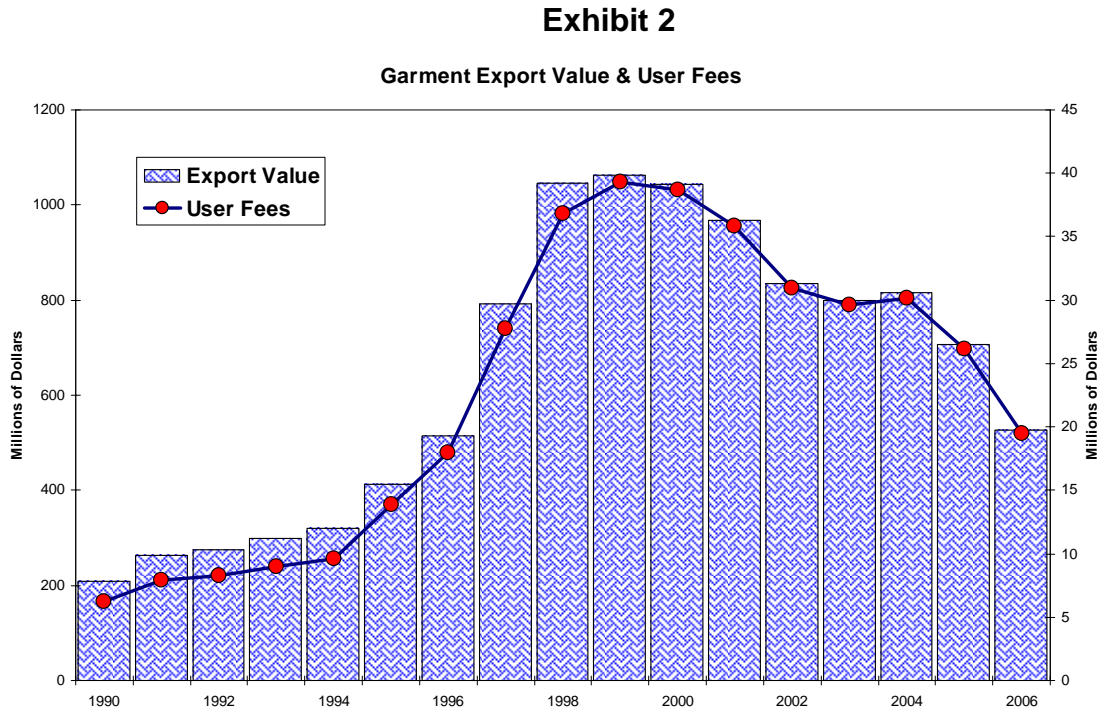
**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Table 6: Total number of guest workers permits issued by industry								
Industry	1999	2000	2001	2002	2003	2004	2005	2006
Banking	10	15	9	10	15	11	13	15
Construction	2,844	2,604	1,794	1,739	1,496	2,076	1,938	1,900
Fishing	11	18	20	18	19	28	16	17
Garment	14,833	16,639	15,104	12,372	11,982	14,512	13,922	10,089
Hotel	2,035	2,887	2,370	2,194	2,203	2,687	2,447	2,375
CNMI government	67	78	53	67	89	193	281	236
Night club/bar	500	598	456	471	480	679	618	540
Farmer	543	558	432	417	445	699	658	653
Private household	1,610	1,823	1,410	1,529	1,597	2,012	1,802	1,699
Restaurant	1,171	1,419	987	1,096	1,021	1,670	1,420	1,279
Services	6,961	8,756	6,954	7,172	7,181	10,998	9,534	8,480
Tourism	339	468	380	389	369	588	491	424
Manpower	49	178	87	81	59	58	15	15
Security services	84	220	214	178	192	194	139	181
TOTAL permits issued	31,057	36,261	30,270	27,733	27,148	36,405	33,294	27,903
Source: CNMI Department of Labor.								

In the 1990s, Saipan’s garment industry grew rapidly to become the single largest source of taxes and jobs in the CNMI, especially on the island of Saipan. According to the SGMA, the industry expanded from 21 factories with \$300 million of sales (wholesale value) in 1992 and peaked at 34 factories with sales of \$1.06 billion in 1999. Sales began to decline in 2000 and continued to be weak through 2002 when they totaled \$831 million. The 29 factories still in business in 2003 expected to sell garments valued at about \$765 million. Garment taxes and fees still accounted for more than one-quarter of the government’s direct revenues. Garments also provided 40-45 percent

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

of jobs in the Commonwealth, according to the SGMA.⁴⁰ Exhibit 2 shows the trend of garment exports and of CNMI government user fee revenues through 2006. By 2006, revenues had fallen by half compared to the 1999 peak.



The number of operating garment factories had declined to 21 by the end of 2006, and to 15 by early August 2007. Since early August 2007, an additional seven factories have either closed or announced plans to close.⁴¹ The initial fifty-cent increase in the minimum wage (to \$3.55 per hour) became effective July 25, 2007. In media reports since then announcements of garment factory closures have frequently included reference to the higher minimum wage as a contributing factor. Following are some representative quotes from recent media reports:

*“Once the second fifty-cent **minimum wage** increase takes effect next summer, seven of the remaining garment factories which have not yet announced their closures will also cease operations, according to Richard A. Pierce, the governor’s special assistant for trade relations and economic affairs.” (Marianas Variety, December 14, 2007)*

⁴⁰ Information and chart provided by Office of Insular Affairs, U.S. Department of Interior.

⁴¹ Media reports and interview information provided by representatives of CNMI government.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

“It was well within the federal government’s control to arrest this long announced downturn in the industry, and keep this industry alive until at least 2009 and possibly longer. I refuse to listen to anyone that says it was going to happen anyway. That may have been true in 2009 or 2010, but it did not have to happen now,” Pierce said.” (Marianas Variety, December 14, 2007)

*“Garment manufacturers have been exiting the Commonwealth, citing adverse economic conditions caused by increases in the **minimum wage**, trade competition in China and other Asian countries, the increased costs of conducting business and a slump in orders.” (Radio New Zealand International, December 10, 2007)*

The lack of detailed historical and contemporary labor market data for CNMI makes it impossible to distinguish among the contributions of the various adverse factors that have impacted the CNMI garment industry since 1999.

Tourism

Tourism is the second basic component of the CNMI economy, providing a source of income and jobs directly and indirectly because of the re-spending effect of wages paid to tourist industry workers. The 2002 Economic Census found 4,304 workers employed in the Accommodation and Food Services sector – the industry sector primarily associated with the tourism industry. Air transportation accounted for an additional 206 workers in 2002. Together the 4,510 workers in these industry sectors accounted for 13.8 percent of total employment.⁴² CNMI has potential advantages as a tourist destination because of its proximity by air to Japan and Asia, its climate, and the natural beauty of the islands.

The tourism industry grew rapidly in the early 1990s, declined in the second half of the decade, and has seen further declines recent years.⁴³ Fueled by the East Asian economic boom of the late 1980s and early 1990s, tourist traffic to the Commonwealth tripled in less than a decade (1988-96) from 245,545 to 736,117. With the onset of the Asian financial crisis in late 1997, tourist arrivals began to drop. The decision by Korean Air Lines to suspend all flights to Guam and Saipan

⁴² U.S. Census Bureau, 2002 Economic Census of Island Areas: Northern Mariana Islands, Table 1.

⁴³ Information in this section was provided by Office of Insular Affairs, U.S. Department of Interior.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

in late 1997 after the crash of one of its jumbo jets near the Guam airport had an immediate impact. In part because of the near shutdown of the Korean market that followed, and more generally because of the continuation of the Asian financial crisis, total CNMI tourist traffic was down to 490,165 in 1998, roughly where it had been in 1992.

Tourist traffic recovered some lost ground in 1999-2000, when the total exceeded 500,000 again, but did not recover to the 1996 peak. In 2001, in the aftermath of terrorist attacks on New York and Washington that caused many Japanese visitors to stay at home for some time, tourist arrivals fell significantly again, to 444,284, or roughly the count of a decade earlier. In 2002, the count was up 7.0 percent to 475,169, mainly as a result of deep discounts, but still 35.4 percent below the 1996 peak. Tourism was weakened further when Japan Airlines (JAL) withdrew from the market altogether in 2005.

From 1988 to 1996, tourism was the Commonwealth's second most important income source. The impact of tourism extends beyond carriers and hotels and restaurants. Tourist spending partly supports the CNMI's retail trade, especially in the urban areas that cater more to tourists than residents. By extension, tourist spending also contributes to the support of other services, including transport services. When tourist numbers rise, the effects show up in many segments of the economy. In the same way, contractions in tourist numbers leave a range of goods and service providers in financial stress.

In keeping with other growth trends over the period, the number of hotel rooms rose from fewer than 2,000 in 1988 to almost 3,000 in 1992, peaked at 4,651 in 1998 and declined slightly to 4,313 in 2002. Over 85 percent of all hotel rooms in the Commonwealth are on Saipan. The Tinian Dynasty Hotel and Casino, with 440 rooms, is thus far the only major hotel built on another island. The average hotel occupancy rate for the Commonwealth, which the Hotel Association of the

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Northern Mariana Islands started reporting in 1992, peaked at 85.6 percent in 1996, dropped to 54.4 percent in 2001, and rose to 63.4 percent in 2002.

Total tourist spending in the Commonwealth was reported to have been \$587 million in 1996 and dropped to \$585 million in 1997. In 1998, it fell further to an estimated \$393.4 million, 33 percent below the 1996 level. In 1999-2000, tourist spending was estimated to have reached \$400-430 million.

Hotel, motel, and restaurant employment suffered a decline of an estimated 25-40 percent between 1997 and 2002. Currently, no tourist spending estimates are available for the Commonwealth. A crude estimate of tourist spending can be obtained by applying the average daily spending (based on tourist exit surveys) to the total tourist counts. This method yielded an estimate of total spending of around \$225 million for 2002, less than half of what was reported in 1996.⁴⁴

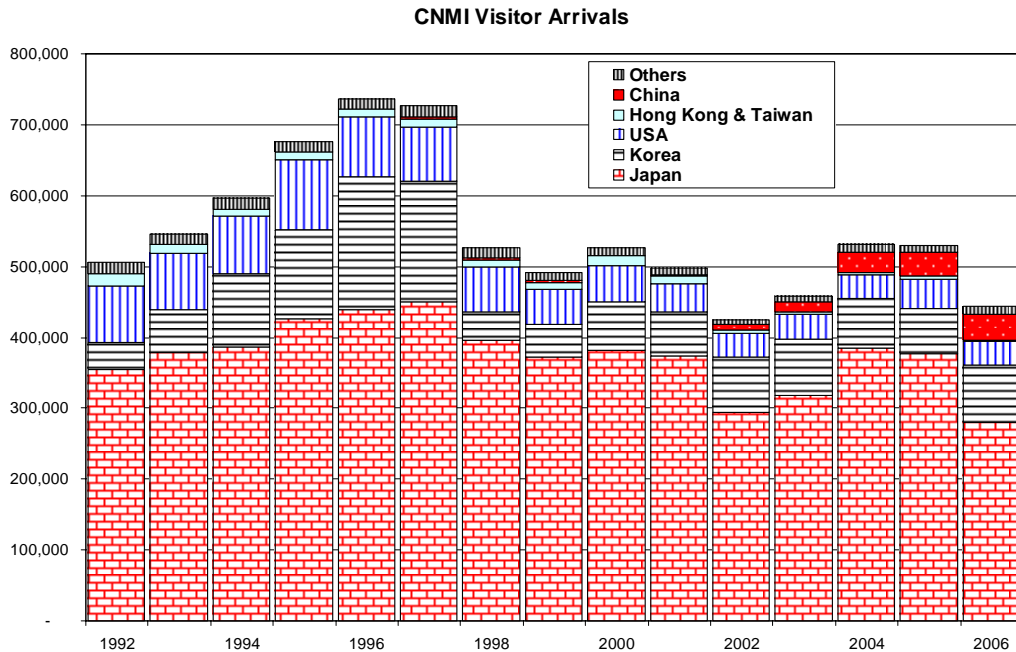
The tourism industry in the CNMI has also suffered from the consequences of changes in regional and global air transport arrangements driven by market forces which dictate corporate resource realignments. One such change that had a large and immediate negative effect on the CNMI economy and public finances was the pullout by JAL in October 2005. This was significant, because JAL customarily carried about 40 percent of all Japanese tourists to the CNMI, who also constituted 29 percent of total arrivals. With no other carrier filling the void, JAL's pullout meant the loss of up to 40 percent of Japanese tourists. The exit of JAL also affected garment producers as the reduction in available flights for air cargo increased the cost of exporting garments.

Currently the tourist industry in CNMI appears to be operating far below its potential, and immediate remedies are not evident. In 2006, tourist traffic fell 16 percent. (See Exhibit 3.) The decline of tourism is significant because of the large and diverse financial impacts of the

⁴⁴ Estimates provided by Office of Insular Affairs, U.S. Department of Interior.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Exhibit 3



industry on the overall economy. Tourists not only spend money on hotels and food in the islands, but they shop at local retail outlets and buy gifts to take home. They engage in diving, sightseeing and other recreational services that local vendors supply. All the activities tourists engage in employ local labor and resources.

For the longer term there is potential for improvement of the performance of the industry. A tourist market that holds long-term potential for CNMI is China. Tourists from China were such a small number in 1996 that they were lumped together with “other” markets. They increased some in the next few years, but averaged just over 2,200 per year from 1997 to 2001. In 2002, the number of Chinese tourists increased nearly five-fold to 10,471. Although they made up just over 2 percent of the market share in 2002, Chinese tourists are likely to increase in the years ahead, perhaps at rates greater than those of either Japanese or Korean tourists in the past decade. In 2000, over 10 million Chinese traveled abroad, making them the second largest group in East Asia, after Japanese travelers, who then numbered 18 million.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

In anticipation of travel liberalization in China and addition of the CNMI to the “approved list of destinations” which Chinese citizens may visit without restrictions, the CNMI government rebuilt and expanded Tinian’s runway to accommodate wide-bodied jets such as the Boeing 767. The existing airport terminal building is small, reflecting the island’s past remoteness, but that could change with improving financial conditions in the CNMI.

Summary of Current Economic Conditions in CNMI

The CNMI does not yet have in place macroeconomic data collection and accounting systems technology capable of generating information on total output and its components on a monthly or quarterly basis. As a result, there is not a way to provide objective measures of productive capacity, capacity utilization, employment, wages or unemployment rates. The Census Bureau’s International Programs Center, with the participation of staff from the CNMI Department of Commerce, works on estimates of GDP for the CNMI; however, these estimates have not yet been released. In the absence of complete and accurate macroeconomic data, there is no objective method to gauge the level of aggregate economic activity, the level of employment it supports, or other important measures such as total personal income, consumption, savings and other metrics that explain the well-being of the population and the average citizen. The information vacuum continues to be an obstacle to an objective and comprehensive assessment of the economy and its productive capacity. The lack of such data are especially a barrier to assessing the current and future impact of the recent and scheduled increases in the minimum wage.

Under a technical assistance program of the Office of Insular Affairs, U.S. Department of the Interior, the CNMI is developing local expertise to generate national income and product account (NIPA) or macroeconomic data in a manner the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce produces for the United States and the 50 states. Among the factors that make this and other data gathering and analysis work challenging is that the CNMI (as a

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

U.S. territory along with American Samoa, Guam and the U.S. Virgin Islands) is not included in the U.S. Census Bureau's American Community Survey (ACS) or other surveys that generate current detailed data on the 50 states and most areas of population of 65,000 or more. Nor is the CNMI included in surveys that generate current data on industries, production and household income and expenditures.⁴⁵

An alternative perspective on economic activity is provided by transactions subject to the CNMI's business gross revenues (BGR) tax. The Commonwealth has no sales tax. Instead, several types of taxes are imposed on various types of business activities. For example, an excise tax of 4 percent, embedded in the price before sale, is levied on goods and services, and is a condition of doing business in the Commonwealth. Garment sales are subject to user fees and excise taxes, as are other activities. BGR tax collections and the compilation of the underlying transaction data make it possible to keep track of the tax base. Although the tax-base data are often incomplete and not current because of filing and accounting issues, they are the only source of information on aggregate business activity. Also, since BGR taxes are levied on a wide range of business activities, they provide useful information on the various types of business activities.

⁴⁵ Information provided by Office of Insular Affairs, U.S. Department of Interior.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Exhibit 4

**Business Gross Revenues
(Millions of Dollars)**

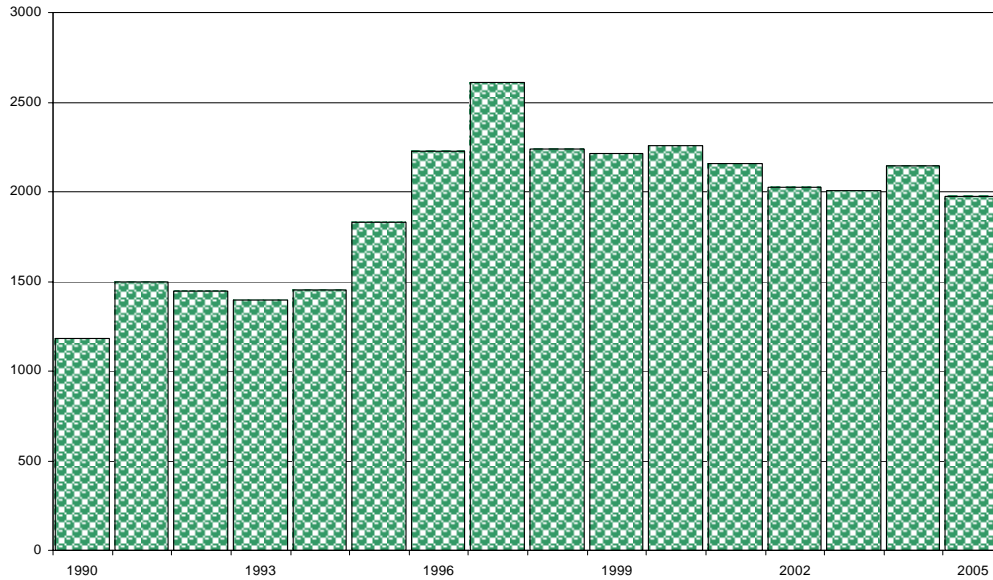


Exhibit 4 shows the trend of CNMI business gross revenues (BGR) in recent years.⁴⁶ Total BGR increased quite rapidly from 1993 to 1997, reaching a record \$2.6 billion in 1997, just before the onset of the Asian financial crisis. The crisis caused a 14.3 percent loss in total business revenue in 1998, pushing it back to the level of 1996. In 1998-2001, the annual total remained stable. BGR data for 2002 showed large decrease in aggregate business activity. Total business receipts in 2002 were down 10 percent from 2001. Receipts for 2003 were stagnant. A rebound in 2004 (reflecting some improvement in tourism) was reversed in 2005, with a decline of more than 10 percent reflecting both the shrinking garment industry and the fall-off in tourism following the withdrawal of JAL.

⁴⁶ CNMI Department of Commerce.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Impact of Minimum Wage Increases

With both of its major industries declining simultaneously, the CNMI economy is in overall decline, and its current economic situation makes it especially vulnerable to additional shocks. While data are not available to precisely quantify the impact of the recent and scheduled future increases in the minimum wage, it seems likely that the current economic decline may be made worse. General experience in the U.S. and elsewhere has shown that potential adverse employment effects of minimum wage increases can be masked or offset to some degree by an expanding economy that is generating net employment growth.⁴⁷ No such offsets can be expected in a declining economy.

The proportion of wage and salary employees potentially affected by the minimum wage increases provides an indicator of the potential labor market impact. Data from the CNMI 2004 household and expenditure survey shows that 68.2 percent of wage earners in CNMI earned no more than \$4.99 per hour and that 79.5 percent earned no more than \$7.99 per hour. The scheduled increase in the minimum wage to \$7.25 (by 2015) will likely affect at least 75 percent of wage and salary workers in CNMI. By comparison, in order to directly affect 75 percent of U.S. hourly workers, the minimum wage would need to be raised to \$16.50, the 75th percentile mark for wage and salary workers who are paid hourly rates.⁴⁸

Because CNMI has such a large proportion of temporary, non-citizen workers in its labor force, it is likely that future job losses will exacerbate the declining population trend in evidence since 2000. Non-citizen temporary workers experiencing job loss will return to their countries of origin. Because citizens of CNMI are U.S. citizens, they have access to the U.S. labor markets, including Guam, Hawaii and the mainland. It is possible that movements of workers from CNMI

⁴⁷ Some recent U.S. research regarding the effects of minimum wage increases suggests some positive employment effects when increases are associated with labor markets characterized by a degree of monopsony power.

⁴⁸ The data reflect analysis by the Office of the Assistant Secretary for Policy of unpublished tabulations from the Bureau of Labor Statistics of hourly earning of employed wage and salary workers who are paid hourly rates for 2006 (annual averages). The figures are for wage and salary workers who report being paid on an hourly basis – a close approximation for workers covered by FLSA minimum wage provisions.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

into these U.S. labor market areas may increase as the minimum wage schedule for CNMI is implemented. This would likely lead to additional population declines in CNMI.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Bibliography

Government Reports, Surveys, and Testimonies

- U.S. Bureau of the Census. *2000 Census of Population and Housing: The Commonwealth of the Northern Mariana Islands*. Prepared by Economic and Statistics Administration, Bureau of the Census. Washington, DC: Government Printing Office, May 2003.
- U.S. Bureau of the Census. *Economic Census of Island Area: Northern Mariana Islands, 2002*. Prepared by Economic and Statistics Administration, Bureau of the Census. Washington, DC: Government Printing Office, May 2004.
- U.S. Bureau of the Census. *Economic Census of Island Area: American Samoa, 2002*. Prepared by Economic and Statistics Administration, Bureau of the Census. Washington, DC: Government Printing Office, April 2005.
- U.S. Bureau of the Census. *Commonwealth of the Northern Mariana Islands Estimated Total Population, labor Force, Employment, and Personal Income from the 2005 Household, Income, and Expenditure Survey*. September 2007.
- U.S. Congress. Joint Economic Committee. *50 Years of Research on the Minimum Wage*. February 15, 1995.
- American Samoa Department of Commerce. *American Samoa's Economic Future and the Cannery Industry*. Prepared by the Department of Commerce, American Samoa government and Malcolm D. McPhee and Associates, Forthcoming.
- American Samoa Department of Commerce, *Statistical Yearbook 2006*. Pago Pago, American Samoa.
- CNMI Department of Commerce, *Statistical Yearbook 2002*. Prepared by the CNMI Central Statistics Division, Department of Commerce. Saipan, MP.
- U.S. Department of Commerce. *Economic Indicator: Commonwealth of the Northern Mariana Islands*. Prepared by the Central Statistics Division, Department of Commerce. Saipan, MP, 2007.
- U.S. Department of Labor. *Economic Report: The Minimum Wage in American Samoa, 2007*. Prepared by the Employment Standards Administration, Wage and Hour Division, Department of Labor. Washington, DC: Government Printing Office, May 2007.
- U.S. Department of Labor. *Evaluation of the Hay Report: Minimum Wage analysis for the Commonwealth of the Northern Mariana Islands*. Prepared by the Employment Standards Administration, Wage and Hour Division, Department of Labor. Washington, DC: Government Printing Office, March 1998.
- U.S. Department of Labor. Special Industry Committee Number 27 for American Samoa. *Pre-hearing Statement of StarKist Samoa, Inc.*, May 30, 2007.
- U.S. Department of Labor. Special Industry Committee Number 27 for American Samoa. *Pre-hearing Statement of Cos Samoa Packing Company*, May 30, 2007.
- U.S. Department of Labor. *Report of American Samoa Industry Committee Number 26 Based upon Hearings Conducted June 20-June 24, 2005 in the Senate Chambers of the Fono Pago Pago, American Samoa*. Prepared by the Employment Standards Administration, Wage and Hour Division, Department of Labor.
- U.S. Department of the Interior. *American Samoa*. Unpublished briefing paper prepared by the Office of Insular Affairs, Department of Interior. Washington, DC, December 2007.
- U.S. Department of the Interior. *Commonwealth of the Northern Mariana Islands*. Unpublished briefing paper prepared by the Office of Insular Affairs, Department of Interior. Washington, DC, December 2007.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

- U.S. Department of the Interior. *The Economic and Financial Impact of American Samoa Cannery Shutdown on the Territory's Economy, Employment, Public Sector and the Federal Budget*. Prepared by the Office of Insular Affairs, Department of Interior. Washington, DC, July 2006.
- U.S. Department of the Interior. *2006 Island Fellows: A Private Sector Assessment for American Samoa*. Prepared by the Office of Insular Affairs, Department of Interior. Washington, DC, August 2006.
- Congressional Research Service. *The Federal Minimum Wage and American Samoa*, by Whittaker, William. Washington, DC: Congressional Research Service, May 2007.
- Government of American Samoa. *A Report to the Governor on Minimum Wage Increases and Escalating Clause Impact*. Prepared by the Minimum Wage Task Force. November 21, 2007.
- Hotel Association of the Northern Mariana Islands. Testimony Prepared for the U.S. House of Representatives Committee on Natural Resources, Subcommittee on Insular Affairs, August 2007.
- Strategic Economic Development Council's Unified CNMI Minimum Wage Position. Private Sector Task Force submitted to the Honorable Governor Benigno R. Fitial, Commonwealth of the Northern Mariana Islands, January 3, 2007.
- Strategic Economic Development Council. Tourism, Japan Airlines, and the Commonwealth of the Northern Mariana Islands: An Economic Impact Analysis. June 2005.

Periodicals, Studies, and Working Papers

- Bernstein, Jared, and John Schmitt. *Briefing Paper: The Impact of the Minimum Wage*. Washington, DC: Economic Policy Institute, June 2000.
- Deere, Donald, Kevin M. Murphy, and Finis Welch. "Sense and Nonsense on the Minimum Wage." *Regulation*, Number 1, 1995.
- Freeman, Alida Castillo, and Richard B. Freeman. *Minimum Wages in Puerto Rico: Textbook Case of a Wage Floor?* Cambridge, MA: National Bureau of Economic Research, Working Paper 3759, June 1991.
- Hamnett, Michael, and William Sam Pintz. *The Contribution of Tuna fishing and Transshipment to the Economies of American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam*. Honolulu, HI: Joint Institute for Marine and Atmospheric Research, 1996.
- Krueger, Alan B. *The Effect of the Minimum Wage When It Really Bites: A Reexamination of the Evidence from Puerto Rico*. Cambridge, MA: National Bureau of Economic Research, Working Paper 4757, June 1994.
- Lester, Richard A. "Wage Differential and Minimum Wage Effects." In *Labor Economics and Industrial Relations: Market and Institutions*, edited by Clark Kerr and Paul D Staudohar, 189-205. Cambridge, MA: Harvard University Press, 1994.
- Erin Lett and Judith Banister, "Labor Costs of Manufacturing Employees in China: An Update to 2003-04," *Monthly Labor Review* 129, no. 11 (November 2006): p. 40-45.
- Neumark, David, and Olena Nizalova. *Minimum Wage Effects in the Longer Run*. Cambridge, MA: National Bureau of Economic Research, Working Paper 10656, July 2004.
- Neumark, David, and William Wascher. *Minimum Wage Effects and Low-Wage Labor Markets: A Disequilibrium Approach*. Cambridge, MA: National Bureau of Economic Research, Working Paper 4617, January 1994.
- Neumark, David, William Wascher. *Minimum Wage and Employment: A Review of Evidence from the New Minimum Wage Research*. Cambridge, MA: National Bureau of Economic Research, Working Paper 12663, November 2006.

Impact of Increased Minimum Wages on the Economies of American Samoa and the Commonwealth of the Northern Mariana Islands

- Neumark, David, and William Wascher. *Employment Effects of Minimum and Subminimum Wages*. Cambridge, MA: National Bureau of Economic Research, Working Paper 4570, December 1993.
- Northern Marianas College, Business Development Center. *An Economic Study for the Commonwealth of the Northern Mariana Islands*. Saipan, MP: Northern Marianas College, October 1999.
- Malcolm D. McPhee and Associates. *An Economic Development Strategy for American Samoa*. Prepared for the Office of Development Planning, American Samoa government. Olympia, WA: Malcolm D. McPhee and Associates, September 1981.
- Shin, Jong Soon. *Commonwealth of the Northern Mariana Islands Business Opportunities Report*. Prepared for the Office of Insular Affairs, Department of Interior. CNMI, July 2007.
- Turner, Rick. *American Samoa Business Opportunities Report*. Prepared for the Office of Insular Affairs, Department of Interior. American Samoa, July 2007.

Articles

- Calindas, Marconi. "Over 50-Year-Old Business Shuts Down." *Saipan Tribune*, October 4, 2007.
- de la Torre, Ferdie. "Two More Garment Factories Shutting Down." *Saipan Tribune*, November 12, 2007.
- Deposa, Moneth G. "Call Center Opening Doubtful." *Marianas Variety*, November 15, 2007.
- Malama Communications, Inc. "Fono Report Foretells Economic Recession." Malama TV <http://malama.solupress.com/malama/news/articles/article1628.asp> May 15, 2007.
- Mata'afa, Tina. "Preliminary Findings Are Grim, Impact Study Team Reports." *Samoa News*, September 21, 2007.
- Mata'afa, Tina. "Impact Study Emphasizes Role of Feds in Territory's Economic Development." *Samoa News*, September 22, 2007.
- Mata'afa, Tina. "StarKist Points Out Termination in ASPA's PPC." *Samoa News*
- Matthews, Robert Guy. "Ship Shortage Pushes Up Prices of Raw Materials." *Wall Street Journal*, October 22, 2007.
- Sagapolutele, Fili. "With wage hikes on Horizon Hopes for New Jobs Fade." *Samoa News*.
- Sagapolutele, Fili. "Minimum Wage Bill Slammed In American Samoa." *Pacific Magazine*, June 4, 2007.
- South Seas Broadcasting, Inc. "Task Force Reports on Impact of Escalator Clause in the Minimum Wage Law." KHJ News <http://khjnews.solupress.com/khjnews/news/articles/article4898.asp> November 19, 2007.
- South Seas Broadcasting, Inc. "Governor Forms New Economic Advisory Council." KHJ News <http://khjnews.solupress.com/khjnews/news/articles/article4891.asp> November 19, 2007.
- South Seas Broadcasting, Inc. "U.S. House Approves 1 Year Extension of Tax Credits." KHJ News <http://khjnews.solupress.com/khjnews/news/articles/article4751.asp> November 9, 2007.
- South Seas Broadcasting, Inc. "Chamber of Commerce Members Not Directly Affected by Wage Hikes but Worried About Canneries." KHJ News <http://khjnews.solupress.com/khjnews/news/articles/article1367.asp> June 5, 2007.
- South Seas Broadcasting, Inc. "Samoa Packing Plans Layoff of More Than 200 Employees." KHJ News <http://khjnews.solupress.com/khjnews/news/articles/article1364.asp> June 5, 2007.
- Wolman, Lewis. "What's American Samoa's Future If Canneries Pack Up?" *Pacific Magazine*, January 1, 2002.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Interviews

- Avegaglio, Tusi. July 2007. Interview by James Carter (via telephone). Dr. Avegaglio is affiliated with the University of Hawaii and recently conducted a survey in American Samoa of the local population's skills (English fluency, computer literacy, basic math skills).
- Ayre, Gary. November 2007. Interview by James Carter (via telephone). Mr. Ayre is President and Chief Executive Officer of ANZ Amerika Samoa Bank.
- Benedetto, Jim . November 2007. Interview by James Carter (via telephone). Mr. Benedetto works for the Department of the Interior's Federal Ombudsman's Office in CNMI.
- Betham, Jason. September 2007. Interview by James Carter and Jay Berman (via telephone). Mr. Betham works for the Development Bank of American Samoa.
- Blatt, Bob. September & December 2007. September interview by Ronald Bird, James Carter, et al (via telephone). December interview by James Carter and Jay Berman (via telephone). Mr. Blatt is the Chief Financial Officer for Chicken of the Sea.
- Bonham, James. October 2007. Interview by Ronald Bird, James Carter and Jay Berman. Mr. Bonham works for BrownRudnick, representing Del Monte Foods.
- Cabrera, Lee. December 2007. Interview by James Carter (via telephone). Mr. Cabrera is the Port of Saipan Manager with the Commonwealth Ports Authority.
- Cohen, David. Multiple discussions starting in June 2007. Mr. Cohen is a Deputy Assistant Secretary at the U.S. Department of the Interior. He oversees the department's Office of Insular Affairs.
- Conway, Dick. August 2007. Interview by Ronald Bird, James Carter, et al (via telephone). Dr. Conway is Malcolm McPhee's associate (see below).
- Faleafine-Nomura, Lydia. September 2007. Interview by Ronald Bird, James Carter, and Jay Berman (via telephone). Ms. Faleafine-Nomura is a field representative in American Samoa for the U.S. Department of the Interior's Office of Insular Affairs.
- Faleomavaega, Eni F. Fall 2007. Interview by Ronald Bird, James Carter, Jay Berman, Eric Snyder. Mr. Faleomavaega is a Member of Congress, representing American Samoa.
- Gray, Sara. June 2007. Interview by James Carter. Ms. Gray worked for the U.S. Department of Interior's Office of Insular Affairs.
- Guerrero, Juan . November 2007. Interview by James Carter (via telephone). Mr. Guerrero was the President of the Saipan Chamber of Commerce.
- Hamnett, Michael. August 2007. Interview by James Carter (via telephone). Dr. Hamnett is the Executive Director of the Research Corporation at the University of Hawaii.
- Higgins, Terry. September 2007. Interview by James Carter and Jay Berman (via telephone). Dr. Higgins works for the University of Tennessee.
- Jackson, Susan. September and October 2007. Interviews by Ronald Bird, et al. Ms. Jackson is Vice President of Government Relations for Del Monte Foods.
- Keyser, Michael. October 2007. Interview by James Carter (via telephone). Mr. Keyser is the Acting Chief Executive Officer of the American Samoa Power Authority.
- Knecht, Larry. November 2007. Interview by James Carter (via telephone). Mr. Knecht is Executive Vice President of Pacific Telecom Inc. in CNMI.
- Knight, Lynn. October 2007. Two interviews by James Carter, et al (via telephone). Ms. Knight is President of the Hotel Association of the Northern Marianas Islands.
- Lin, James. December 2007. Interview by James Carter (via email). Mr. Lin is President of the Saipan Garment Manufacturing Association.
- Lipsen, Janice. December 2007. Interview by James Carter (via telephone). Ms. Lipsen is the American Samoan Governor's representative in Washington, D.C.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

- Maximo, Wilfredo DeLeon. December 2007. Exchange of emails with James Carter. Mr. Maximo is the Philippine Consulate General in the CNMI.
- McPhee, Malcolm. Multiple discussions with Ronald Bird, James Carter, et al (via telephone and email) starting in August 2007. Dr. McPhee founded Malcolm D. McPhee & Associates (Economic Development & Research Services).
- Osman, Wali. Multiple discussions with Ronald Bird, James Carter, et al (in person, via telephone and email) starting in June 2007. Dr. Osman is an economist in the Office of Insular Affairs at the U.S. Department of the Interior.
- Pangelinan, Frica. November 2007. Interview by James Carter (via telephone). Ms. Pangelinan is a senator (and chair of the Economic Development Committee) in the CNMI.
- Pierce, Marian. November 2007. Interview by James Carter and Mary Ziegler (via telephone). Ms. Pierce is President of Duty Free Shoppers in the CNMI.
- Pierce, Richard. Multiple discussions with Ronald Bird, James Carter, et al (in person, via telephone and email) starting in September 2007. Mr. Pierce is Assistant to the Governor for Trade Relations & Economic Affairs in the CNMI.
- Pula, Nik. Multiple discussions with James Carter (via telephone) starting in November 2007. Mr. Pula works for the Office of Insular Affairs at the U.S. Department of the Interior.
- Robinson, David. Multiple discussions with James Carter, Mary Ziegler, et al (via telephone) starting in September 2007. Mr. Robinson is President of the Chamber of Commerce in American Samoa.
- Rubin, Marc. September 2007. Interview by James Carter (via telephone). Mr. Rubin works for the U.S. Census Bureau.
- Sablan, Alex. December 2007. Interview by James Carter (via telephone). Mr. Sablan is a marketing manager with the Saipan Shipping Company.
- Sablan, Tina. October 2007. Interview with James Carter and Mary Ziegler (via telephone). Ms. Sablan is running for political office in the CNMI.
- Sander, Stephen. December 2007. Interview with Ronald Bird, James Carter, et al. Mr. Sander is Legislative & Congressional Liaison in the Office of Insular Affairs at the U.S. Department of the Interior.
- Schorr, Jeff. November 2007. Interview with James Carter (via telephone). Mr. Schorr is a field representative for the Office of Insular Affairs in the U.S. Department of the Interior.
- Signorino, John. September 2007. Interview with Ronald Bird, James Carter, et al (via telephone). Mr. Signorino is President and Chief Executive Officer of Chicken of the Sea.
- Suyderhoud, Jack. September 2007. Interview with James Carter and Jay Berman (via telephone). Dr. Suyderhoud is professor of business economics at the College of Business Administration at the University of Hawaii-Manoa.
- Turner, Rick. September 2007. Interview with James Carter and Jay Berman (via telephone). Mr. Turner was an Island Fellow (serving in American Samoa) for the U.S. Department of the Interior.
- Watson, Steve. September 2007. Interview by James Carter (via telephone). Mr. Watson is Vice President of the ANZ Amerika Bank.
- Williams, Angie. Multiple discussions with James Carter (in person, via telephone and email) starting in June 2007. Ms. Williams is an Advisor for Economic Policy in the Office of Insular Affairs at the U.S. Department of the Interior.
- Willins, Howard. December 2007. Interview with Ronald Bird, James Carter, et al. Mr. Willins is Special Legal Counsel & Assistant Attorney General, Office of the Governor in the CNMI.
- Zak, Paul. December 2007. Interview with James Carter (via telephone). Mr. Zak is Chief Executive Officer of the Milgar Corporation in the CNMI.

**Impact of Increased Minimum Wages on the Economies of American Samoa and
the Commonwealth of the Northern Mariana Islands**

Zive, Joshua. Multiple discussions with Ronald Bird, James Carter, et al (in person, via telephone and email) starting in November 2007. Mr. Zive is an attorney with Bracewell & Giuliani. He represents Chicken of the Sea.