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Cingular's Purchase Of AT&T Wireless: An Economic Analysis

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**CINGULAR'S PURCHASE OF AT&T WIRELESS:
AN ECONOMIC ANALYSIS**

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I. SUMMARY

The \$41 billion all-cash purchase of AT&T Wireless (AWE) by Cingular Wireless (Cingular) should result in an immediate boost to the United States economy, creating wealth, jobs, and sustained growth for several years.

The economic effects of this merger, the largest all-cash buyout in American corporate history, are potentially substantial, and can be defined in terms of how the cash will cause an increase in overall aggregate demand, resulting in an economic boost for the nation as a whole. This is known as the "multiplier" effect, because the cash spent immediately and over time by shareholders goes directly into the pockets of others, who also spend. The process is repeated multiple times until nothing remains of the original stimulus.

This research indicates that individual investors, who represent approximately 32% of shareholders of AWE, will spend approximately 80% of the cash received, resulting in an increase in aggregate demand of approximately \$81 billion, creating wealth, jobs, opportunities, and tax revenues to help reduce the budget deficit. Under a pessimistic assumption, that only 68% will be spent, the increase could be as low as \$57 billion. Optimistically, the increase could be as high as \$168 billion, in the event that individual shareholders spend 92% of the cash that they receive.

In the event that shareholders treat the cash windfall similarly to the tax rebate received in late 2001, research indicates that about \$9 billion will be spent within 90 days. This will provide an immediate economic boost.

The multiplier effect on the approximately 52% of institutional

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investors will be significantly less dramatic, because institutions, unlike individuals generally re-invest funds derived from cash sales. Nonetheless, there will be some “cashing out” resulting in a multiplier of \$12 billion due to the “wealth effect” from the \$19 billion premium that Cingular is paying to AWE shareholders.

As the cash from the merger flows into the economy, the multiplier effect kicks in, and while Gross Domestic Product (GDP) rises, there will be a reduction in unemployment. Using standard economic measurement tools, between 34,000 and 116,000 new jobs will be created over time, though job creation will lag the growth in GDP. The research indicates that the transaction will result in an increase in GDP between .5% and 1.7%, with .8% being most likely.

In analyzing comparable economic policy events, the 2001 tax rebate is the best analogy to this transaction. That rebate put \$38 billion in the hands of consumers, compared to the \$41 billion that will be disbursed to AWE shareholders. Approximately one-third of that – about \$13.23 billion – will go directly to individuals, as opposed to institutional shareholders. The individual shareholders are then expected to spend much of what they receive. Economic analysis indicates that the Cingular/AWE merger will have a spending effect similar to that of the tax rebates by stimulating a wave of spending. Indeed, consumers may be willing to spend a greater portion of this payout, because they appear to be convinced that the prolonged recession is finally over.

The tax rebate of 2001 was distributed in the midst of a recession and immediately prior to September 11, 2001: a time of low consumer confidence and spending. Even so, consumers spent 68% of their rebates within two quarters of receiving it, resulting in its own multiplier effect studied by The Heritage Foundation and summarized in this report. Short of another catastrophic shock, the research indicates that consumers are likely to spend a higher percentage of the cash today, because they are much more optimistic than when they received the tax rebate.

This all-cash deal also will help to reduce the budget deficit, because it immediately will produce more taxable income, that will in turn result in revenue collected by the Internal Revenue Service.

Because of these potentially beneficial economic effects, politicians and policymakers should begin to ask whether all-cash deals are better for the economy than those acquisitions financed by debt and/or stock.

Finally, this research did not examine the potential anti-competitive effects of bringing together the nation's second and third largest U.S. suppliers of wireless services. Public filings before the Federal Communications Commission and the Department of Justice addressed those issues.

II. RESEARCH OBJECTIVES

We measured the economic effects of this windfall on the United States economy by:

- Estimating the amount of cash that will be spent following completion of the transaction;
- Analyzing the likely behavior of AWE shareholders, both institutional and individual;
- Applying the appropriate economic multiplier in order to derive the effect of the entire transaction by individual and institutional segment;
- Applying the appropriate multiplier to derive the effect of the transaction for those that choose to spend the cash, in effect immediately returning it to the economy;
- Quantifying in absolute dollars and also as a percentage of Gross Domestic Product (GDP) the economic effect of the transaction using a low, high, and "most likely" sensitivity analysis;
- Estimating the relationship between the GDP growth and job creation; and
- Comparing the estimated effect of this transaction to the tax rebate that consumers received in late 2001.

The two broad segments of AWE shareholders – institutions and individuals – are likely to treat the cash windfall differently.

Institutions will be more apt than individuals to re-invest the cash, most probably into other stocks. For those, we derived the economic impact by calculating the "wealth effect"¹ of the increase created by the premium that Cingular paid AWE stockholders for their stock. Even though some of the deal's cash distribution clearly will be re-invested, studies of a stock market-related wealth effect on personal consumption suggest that each new dollar of wealth can still lead to between 3 and 15 cents of incremental personal consumption within the next 1-2 years. The premium was calculated by comparing Cingular's bid of \$15 per share to the price of \$8 per share for

¹ The wealth effect is the marginal propensity for consumers to spend increases in wealth.

AWE stock in January 2004, prior to the decision to sell the company.

Not all investors arguably will make a profit on AWE stock, since it was spun out of AT&T in 2001 (peaking at over \$19 per share that year). But it is appropriate to measure the wealth effect, since the market and current holders had absorbed a value of close to \$8 per share and the price run up did not occur until AWE was put up for sale. In other words, AWE holders who did not accept the price of \$8 could have sold the stock and simply purchased something else. Those institutional holders that continued to hold or bought the stock believed in the price at that time, and therefore will experience a corresponding wealth effect by Cingular's offer of nearly twice the price per share.

Individual holders, on the other hand, are more likely to treat the windfall like any other unexpected income, and therefore spend, save or invest the cash based on historic economic behavior patterns. To quantify this behavior, historical economic data were used to outline the marginal propensity of consumers to spend and the associated multiplier effect from that data. This analysis should be viewed as the upper range of the transaction's effect, since some consumers are likely to choose to save (or invest) the cash or to pay off debt.

In order to examine the lower range of the transaction's effect, we reviewed and analyzed the economic research on consumer behavior relative to the 2001 tax rebate that most tax payers received late that year. The rebate presents a nice proxy, since AWE holders received their distribution in lump sum checks as soon as the deal closed – exactly what happened with the tax rebate checks. This is presented as a minimum effect, since consumer confidence was extremely low at the time the tax rebates found their way into the economy, largely due to September 11 and the post-boom recession. Moreover, academic research indicates that some consumers spend a portion of a tax refund in advance of receiving it, for example, by running up credit card debt.

A “most-likely” scenario was calculated based upon a marginal propensity to consume situated between these two extremes. The most likely outcome assumes that the U.S. economy does not suffer any catastrophic shocks and that consumer sentiment remains reasonably optimistic.

Finally, since shareholder reactions are crucial to these projections, we explored the mix of AWE investors. As of April 1, 2004, according to the

AWE investor relations department, the AWE shareholder base consisted of 32% individuals and 52% institutional holders, with a strategic wireless investor constituting the remaining 16%.² Public filings indicate that institutions hold 57% of AWE's shares, but that number overstates institutional ownership due to the strategic holding of almost 16% of the company and state pension fund holders. AWE data indicates that 32% of its base is "retail" or consumer as opposed to "institutional." Therefore that figure was used as a basis in the calculations to forecast consumer behavior relative to the cash windfall from this purchase. The strategic wireless investor holdings were subtracted from the analysis, because it is unclear how that company will deploy its financial distribution.

III. FINDINGS

A. INDIVIDUAL INVESTORS

A well established and reliable macroeconomic multiplier effect was used to measure the behavior of individual investors. This effect can be defined in terms of how the cash from the transaction causes a substantially greater increase in the economy's aggregate demand. A brief definition will help clarify the concept:

When an autonomous component of Aggregate Demand changes, equilibrium output (Y) will change. The change in output will be even larger than the initial change in Aggregate Demand. This result for the change in Y to be greater than the initial change in Aggregate Demand is known as the multiplier effect. For example, if the marginal propensity to consume (MPC) is 0.80 and autonomous investment increases by \$200, equilibrium output will ultimately change by \$1,000, not \$200! ... where the (simple) output multiplier is defined as $1 / (1 - MPC)$.³

To put it more simply, a certain percentage of any income and/or windfall is spent almost immediately. This is received by others, who then spend a proportion of what they receive, again almost immediately, until there is nothing left of the original stimulus. This is the multiplier effect. The

² This is based on AWE ownership data from shareholders of record on March 30, 2004. The data indicated that 84% was held by consumer segments including "institution brokerage bank retail" 49.3%, "retail ownership" 34.7%, and an additional 5.7% held in "record name."

³ See <http://www.econweb.com/MacroWelcome/multiplier/notes.html> (last visited Apr. 25, 2005).

proportion that is actually spent by each consumer is known as the marginal propensity to consume.

According to the Bureau of Economic Analysis (BEA), the historical U.S. average of the “marginal propensity to consume out of income” (MPC_{income}) is 0.921.⁴ U.S. government data indicates that from 1959 to 2001, U.S. consumers spent an average of 92.1 cents of every dollar of income and saved (invested) the remaining 7.9 cents. This implies a multiplier of 12.6582 that can be applied to the cash going to consumers:

$$\frac{1}{(1-0.921(MPC_{income}))} = 12.6582 \text{ Multiplier}$$

This results in the maximum effect of the merger, since some consumers may have the ability and desire to save a larger portion of the cash and will treat the windfall differently from ordinary income. It should also be viewed as a long run effect of the transaction, since it takes time for any stimulus to be “multiplied” throughout the economy. If consumers do, in fact, spend less than 92%, the multiplier is reduced, perhaps significantly, and the overall effect on aggregate demand is lower.

1. Multiplier Effect If Individuals Treat Windfall as Ordinary Income

The calculation below focuses on the economic effect in the event that individual shareholders spend 92% of the cash that they receive from the sale of the AWE shares. This is consistent with historical BEA data indicating that consumers spend 92% of their ordinary income. Under this scenario, the transaction will then have a monumental effect on the nation’s economy.

$$\text{\$41 billion (Transaction) x 32.3\% Individual Holders x 12.6582 multiplier = \$167.63 billion}$$

This assumption, although consistent with consumer behavior relative to the BEA economic data, probably overstates the near-term effects, but may be more accurate in the longer term, according to economic research. This is because consumers tend to migrate back to their normal spending patterns after receiving a cash windfall. For example, researchers studying the 2001 tax rebate found that while taxpayers initially used a portion of the rebate to pay down debt, their credit card balances actually drifted back to pre-rebate

⁴ This figure represents the historical average of U.S. Personal Consumption Expenditures / Personal Disposable Income from 1959-2001, as reported by the Bureau of Economic Analysis (<http://www.bea.doc.gov/bea>) (last visited Apr. 25, 2005).

levels.⁵ If consumers treat the AWE income like other income, then this transaction will have an economic impact far greater than some of the economic stimuli that public policy makers have adopted during times of slow economic growth.

2. Multiplier Effect If Individuals Treat Windfall Like Tax Rebate

Johnson, Parker, and Souleles (2004) recently completed a study that quantified the actual spending patterns relative to the tax rebate of 2001.⁶ The authors collaborated with the Bureau of Labor Statistics personnel and added several questions relative to the rebate to the Consumer Expenditure (CE) Survey that the Bureau uses to compile U.S. statistics.⁷ They found that consumer spending increased by 71% of the rebate amount in the three month period immediately after receiving it compared to the previous three month period.⁸ This demonstrates that consumers put the cash windfall to use as soon as they received it. Using advanced statistics and modeling, they calculated the marginal propensity to consume the rebate as 68%.⁹ Using the classic equation, this results in a multiplier of $3.125 \times (1/(1-0.68))$ that can be used to derive the economic effect:

$$\begin{aligned} &\text{\$41 billion (Transaction) x 32.3\% Individual Holders x} \\ &\text{3.125 multiplier = \$41.38 billion} \end{aligned}$$

Using the tax rebate as a proxy probably understates the effect of the Cingular-AWE transaction for several reasons. First, and most important, consumer sentiment was very low during the period that taxpayers received their rebates. Most received their tax rebate between July and September, 2001, and most consumers were feeling relatively pessimistic about the economy. The recession crimped spending before September 11, and the tragedy further dampened it. Second, since Johnson, et. al, measured actual spending, they were not able to measure spending in advance of the tax rebate. Previous research on the effects of tax changes indicates that some consumers spend in advance of receiving the rebates.¹⁰ Third, the researchers reviewed

⁵ David S. Johnson, et al, The Response of Consumer Spending to the Randomized Income Tax Rebates of 2001 (Feb. 2004) (Preliminary and Pending Publication at 4), *citing* Sumit Agarwal, Chunlin Liu, and Nicholas Souleles (2003).

⁶ David S. Johnson, et al, The Response of Consumer Spending to the Randomized Income Tax Rebates of 2001 (Feb. 2004) (Preliminary and Pending Publication).

⁷ *Id.* at 1.

⁸ *Id.* at 10.

⁹ *Id.* at 11.

¹⁰ Alan S. Blinder: "Temporary Income Taxes and Consumer Spending," Journal of Political Economy, 1981, p. 26-53.

consumer spending for a limited amount of time and did not try to define total spending relative to the tax rebate. Finally, the researchers found evidence suggesting that consumers would have incurred additional spending over the next several quarters, but were unable to quantify that spending.¹¹

A critical underlying assumption to this interpretation concerns the nature of the AWE shareholder base compared to the taxpayers studied. While equity holders in general are probably wealthier than the average taxpayer in the U.S., we believe that AWE shareholders probably have a demographic profile similar to the taxpayers that received rebates due to the utility legacy of AWE's parent, AT&T.

3. Estimate of Multiplier Effect Under "Most Likely" Scenario

Actual consumer behavior will be somewhere between these two extremes. The marginal propensity to consume will be closer to 80% (the approximate midpoint between the two bounds). This assumes that consumer sentiment remains relatively stable and that no catastrophic events rapidly change consumers' moods between now and when the checks are distributed. If the marginal propensity to consume is 80%, then the multiplier is exactly $5 \times (1/(1-0.80))$ leading to the following impact on aggregate demand from consumers receiving distribution checks:

**\$41 billion (Transaction) x 32.3% Individual Holders x
5.0 multiplier = \$66.22 billion**

4. The Element of Time

Another way to view these three scenarios is through the prism of time. Johnson, et. al., indicated that consumers spent at least 68% of the rebate within two quarters of receiving it. This was during a time of consumer pessimism. Policy makers probably can assume that AWE stockholders will spend at least that much in the first two quarters and that their spending will migrate toward the long-term average propensity to consume. At any rate, Cingular's purchase of AWE will have a measurable and powerful impact on the economy, and most of the money will be spent within the first two quarters.

¹¹ David S. Johnson, et al, The Response of Consumer Spending to the Randomized Income Tax Rebates of 2001 (Feb. 2004) (Preliminary and Pending Publication at 13).

B. INSTITUTIONAL INVESTORS

In contrast to consumers, institutional shareholders will be more likely to re-deploy the majority of the cash gain into other investments as opposed to spending most of it. Nevertheless, research indicates that when stockholders' portfolios run up, they increase their spending due to the wealth effect. Since Cingular has paid a substantial premium for the AWE shares, \$15 per share compared to \$8 before the run-up, we used the "wealth effect" in order to measure the impact of this transaction. Even though most of the cash distribution will be re-invested, numerous studies of a stock market-related "wealth effect" on personal consumption suggest that each new dollar of wealth will still lead to between 3 and 15 cents of incremental personal consumption within the next one-to-two years.¹² This "marginal propensity to consume out of wealth" (MPC_{wealth}) is relatively low, because a consumer typically only consumes the "annuitized" value of the change in wealth over his or her expected lifetime. This means that consumers typically consume a small portion of their increase in wealth, because they wish to spread their consumption from this "new found" wealth over their lifetimes. The Cingular premium nearly doubled the value of those holding AWE shares. While research indicates that consumers will re-invest most of the premium, they will spend a small part of it, leading to a modest multiplier effect.

Scholarly research was reviewed in order to determine the appropriate multiplier to use in quantifying the "wealth effect" of the transaction. There is no widespread agreement on the precise marginal propensity to consume out of wealth. Research indicates that the estimated multiplier effect due to an increase in wealth is most likely between 1.03 and 1.205. In this study, we used a mid range multiplier of 1.1175 to estimate the effect of the Cingular transaction on institutional holders:

$$\text{\$19.07 billion (Premium) x 51.8\% Institutional Holders x 1.175 multiplier = \$11.6 billion}$$

¹² As Brayton and Tinsley (1996) describe, the U.S. / Federal Reserve Board macroeconomic model estimates the "marginal propensity to consume out of wealth" (MPC_{wealth}) to be between .03 and .05 (per \$1 dollar increase in wealth). Using a more up-to-date sample, Dynan and Maki (2001) estimate this MPC_{wealth} to be between .05 and .15. Juster, Lupton, Smith, and Stafford (1999) provide the highest estimate of MPC_{wealth} at .17, but this may represent the effect on personal consumption over a longer timeframe of 5 years due to the data sources they employed. Also, both the OECD (1998) and Bank of England (2002) have conducted studies to estimate the MPC_{wealth} in the U.S. and selected European countries. Both of these studies estimate the MPC_{wealth} to be between .04 and .07.

To determine the total effect on the economy from this transaction, we added the wealth effect from the institutional holders to that of individuals' collective propensity to consume the cash windfall. Appendix A summarizes the totals using the three different marginal propensity to consume assumptions.

The result is that this transaction will have an impact of between 0.5% and 1.7% of GDP, with a most likely estimate of approximately 0.8%. Importantly, the research indicates that consumers will spend a great portion of their windfall within 90 days of receiving it.

Table 1
Effect of Cingular Purchase of AWE on GDP Growth
Using Different Marginal Propensity to Consume

| Source of MPC _{income} | Wealth Effect from Institutions (\$ Bil) | MPC _{income} | Implied Multiplier | Cash to Individual Holders (\$ Bil) ¹³ | Consumption Effect from Consumers (\$ Bil) | Total Effect from Both Segments | Actual GDP (2003 Q4, \$ Bil) | Cingular Purchase of AWE as % of GDP ¹⁴ |
|---|--|-----------------------|--------------------|---|--|---------------------------------|------------------------------|--|
| BEA's MPC _{income} | \$11.6 Bil | .921 | 12.66 | \$13.23 Bil | \$168 Bil | \$179.2 Bil | \$10,600 Bil | 1.7% |
| MPC _{income} from Tax Research ¹⁵ | \$11.6 Bil | .68 | 3.13 | \$13.23 Bil | \$41 Bil | \$53.0 Bil | \$10,600 Bil | .50% |
| Our Midpoint of MPC_{income} | \$11.6 Bil | .80 | 5.00 | \$13.23 Bil | \$66 Bil | \$77.8 Bil | \$10,600 Bil | .7% |

This increase of between \$41 billion and \$168 billion, with a “most likely” of \$66 billion from the consumer segment, represents an increase in real GDP between 0.5% and 1.7% when added to the \$11.6 billion wealth effect generated from institutional holders. The proposed transaction will have a measurable impact on the nation’s economy that could exceed that of the tax rebate of 2001. This conclusion is based upon the timing of the cash windfall. Consumers today are significantly more bullish than they were in the 3rd and 4th quarters of 2001. Economic theory, confirmed by empirical research, suggests that they thus will spend more money faster. Taxpayers spent 68% of the tax rebate within the first two quarters of receiving it. Research strongly indicated that consumers will spend at least 80% of this cash windfall during the same period.

The total impact on GDP will not occur during this time period due to the time lag, as the spending is “multiplied” throughout the economic system; but by spending 80% of it in six months, this transaction will have a major effect on the economy.

D. POTENTIAL IMPACT UPON JOB CREATION

It is possible to estimate the potential impact of increase in GDP over

¹³ Simple calculation of 32% Individual holders times \$41B cash transaction.

¹⁴ Wealth effect plus consumption effect divided into most recent quarter of GDP (from Bureau of Economic Analysis).

¹⁵ David S. Johnson, et al, The Response of Consumer Spending to the Randomized Income Tax Rebates of 2001 (Feb. 2004) (Preliminary and Pending Publication at 13).

time on job creation. While there is no widespread agreement by scholars on the precise relationship between GDP growth and a reduction in the unemployment rate, empirical studies suggest that a correlation in the range of a 2% to 3% growth rate results in a 1% reduction in the unemployment rate, with the new employment lagging growth.¹⁶ If this transaction has the expected economic impact, then policy makers can expect a decrease in the unemployment rate of between 0.25% and 0.85%, resulting in between 34,000 and 116,000 jobs over time.¹⁷

The merger will have a major economic stimulus. The research demonstrates that consumers will spend more than two thirds of the stimulus within the first quarter of receiving it. This means that the combination will inject over \$9 billion in the economy within 90 days of the deal's consummation. Moreover, this economic stimulation will not increase the federal budget deficit, like typical government stimuli. Indeed, since some of the proceeds will be paid in taxes, it will reduce the federal deficit rather than increase it.¹⁸ Furthermore, because the economy is now beginning to recover from a prolonged recession, job creation will follow.

IV. MAJOR COMPARABLE: THE TAX REBATE OF 2001

The Tax Rebate of 2001, which put \$38 billion of cash into consumers' hands, is almost the same size as the Cingular/AWE transaction of \$41 billion.

The Heritage Center for Data Analysis created a detailed model to forecast the effects of the tax plan on the United States economy in the period from 2002 to 2011. The Heritage economists used forecasts from the Joint Committee on Taxation as a key input and then refined those forecasts based on changes in behavior that the tax plan was likely to cause. The Heritage simulation model attempted to forecast how the tax plan would change key macroeconomic drivers, including GDP, interest rates, employment, personal

¹⁶ See Martin Zagler, *Growth and Unemployment: Theory, Evidence, and Policy*, Vienna University (Jan. 2002, at 8) (this source provides a useful summary of the current literature on the relationship between growth and employment).

¹⁷ We assume U.S. employment of 136 million from Heritage Foundation as found in D. Mark Wilson and William F. Beach, *The Economic Impact of President Bush's Tax Relief Plan*, A REPORT OF THE HERITAGE CENTER FOR DATA ANALYSIS, (April 27, 2001, Appendix B, at 11). We also used a two to one ratio in GDP growth to reduction in unemployment.

¹⁸ We did not attempt to calculate the merger's effect on taxes for two reasons. First, AWE had no data on the basis for AWE shareholders, a critical component to estimate their taxes on the windfall. Second, we had no data on the various marginal tax rates on AWE holders.

income and inflation.¹⁹ The economists also forecast how the tax plan would change the behavior of key economic players. For example, a decrease in tax rates was likely to result in a modest increase in the labor force.²⁰

The economists concluded that by the end of FY 2011, GDP growth would be \$246 billion higher than it would have been without the tax plan, and that GDP would increase by an average of 0.2 percent a year during a nine year period.²¹ Implementation of the tax plan was projected to add an incremental \$23.7 billion in 2002, \$56.1 billion in 2003, and \$89.2 billion in 2004 to the nation's GDP.²² It is important to note that the Heritage estimate for GDP growth in 2003 was 3.4%, substantially lower than actual GDP growth of 4.8%, indicating that the analysis may understate the exact effect of the tax plan on the economy. Table 2 reproduces the estimation of the tax plan on GDP and the growth in GDP in the period from 2002 to 2007.

Table 2
Effect of Bush Tax Plan on GDP & GDP Growth
The Heritage Center for Data Analysis

| GDP (\$Bils) | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Forecast | 9,814.8 | 10,181.7 | 10,524.2 | 10,869.6 | 11,219.7 | 11,572.0 |
| Baseline | 9,791.1 | 10,125.6 | 10,435.0 | 10,746.5 | 11,069.2 | 11,401.2 |
| Variance | \$23.7Bil | \$56.1Bil | \$89.2 Bil | \$123.1 Bil | \$150.5 Bil | \$170.8 Bil |
| Growth Rate | | | | | | |
| Forecast | 3.3% | 3.7% | 3.4% | 3.3% | 3.2% | 3.1% |
| Baseline | 3.0% | 3.4% | 3.1% | 3.0% | 3.0% | 3.0% |
| Variance | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.1% |

According to the Heritage economists, the tax plan would have a substantial impact upon the nation's economy and the GDP in its first six years.

The tax plan's impact during the first years is similar in size to the effect that we project from the Cingular/AWE transaction. Furthermore, the Cingular/AWE transaction does not have any of the budget deficit risks. In addition, the Heritage economists estimated that tax relief would result in a net increase in jobs of at least 1.5 million during the first three full years.²³ If

¹⁹ D. Mark Wilson William F. Beach, *The Economic Impact of President Bush's Tax Relief Plan*, A Report of the Heritage Center for Data Analysis, (April 27, 2001, Appendix A, at 10).

²⁰ *Id.* at 10.

²¹ *Id.* at 6.

²² *Id.* Appendix B, at 11.

²³ *Id.* Appendix B, at 11.

their modeling was correct, the cash infusion created by the Cingular/AWE transaction would create an impact potentially equal to the tax rebates of 2001.

The economic impact from the Cingular/AWE merger might be noticeable at a much faster rate, due to the timing of when consumers receive the cash. The agreement closed at the end of 2004. Assuming that the economy suffers no major shocks, the cash from will be spent by consumers at a much faster rate. This will lead to faster growth in aggregate demand along with a faster ramp up of new job growth.

V. CONCLUSIONS

Cingular's offer for AT&T Wireless will likely result in a number of positive economic effects, including:

- The immediate creation of new wealth as checks are mailed to stockholders and over \$9 billion is spent within 90 days of the deal's consummation.
- An immediate and continuing wave of new spending, resulting in a multiplier effect that will boost the U.S. economy. This economic boost is likely to result in an increase in aggregate demand of \$81 billion. If individual AWE shareholders are optimistic and spend as much as 92% of the "windfall," the multiplier effect will be much higher.
- Sustained growth of the Gross Domestic Product, giving a much needed stimulus to the U.S. economy as it continues to recover from a deep and prolonged recession.
- A longer term generation of between 34,000 and 116,000 new jobs.
- A reduction in the Federal deficit because the growth in aggregate demand will, over time, generate tax revenue caused by the increase in wealth, spending, and job creation.
- If, as appears likely, that all-cash deals have a greater and more immediate positive economic effect than transactions financed through debt and/or stock, politicians and policymakers should consider legislation and/or policies that encourage all-cash acquisitions over those that are financed by debt and/or stock.

**APPENDIX A:
EFFECTS ON GDP GROWTH OF CINGULAR'S PURCHASE OF AWE
USING DIFFERENT MARGINAL PROPENSITY TO CONSUME ASSUMPTIONS**

Panel a. Estimated Effect on Real Personal Consumption and Real GDP from Cingular's Purchase of AWE

| Source of MPC _{income} Estimate | Midpoint of MPC _{wealth} * | Wealth Multiplier | % Institutional Ownership** | Cingular Premium to AWE Holders (\$ bil)*** | Estimated Wealth Effect from Institutional Holders (\$ bil) | Estimated MPC _{income} | MPC _{income} Multiplier | % Individual Ownership | Cingular Cash Received by AWE Holders (\$ bil) | Estimated Consumption Effect from Consumers (\$ bil) | Total Effect from both Segments on Aggregate Demand | Actual Real GDP (2003 Q4, \$ bil.) | Expressed as a % of GDP |
|--|-------------------------------------|-------------------|-----------------------------|---|---|---------------------------------|----------------------------------|------------------------|--|--|---|------------------------------------|-------------------------|
| BEA's MPC _{income} | 0.1489 | 1.175 | 51.8% | \$ 19.1 | \$ 11.6 | 0.921 | 12.66 | 32% | \$ 41.0 | \$ 167.6 | \$ 179.2 | 10,600 | 1.7% |
| MPC _{income} from Recent Tax Research (Johnson, Parker, and Souleles, 2004) | 0.1489 | 1.175 | 51.8% | \$ 19.1 | \$ 11.6 | 0.68 | 3.13 | 32% | \$ 41.0 | \$ 41.4 | \$ 53.0 | 10,600 | 0.5% |
| Our Midpoint of MPCIncome | 0.1489 | 1.175 | 51.8% | \$ 19.1 | \$ 11.6 | 0.8 | 5.00 | 32% | \$ 41.0 | \$ 66.2 | \$ 77.8 | 10,600 | 0.7% |

* - Implied multiplier from midpoint of MPCwealth as found in recent research and previous citations

** - Percentage of AT&T Wireless (AWE) shares owned by institutional investors (as of April, 2004) from AWE Investor relations not including DoCoMo

*** - Computed by taking Cingular offer of \$15 a share and comparing to AWE share price in January, 2004 (\$8 per share) times shares outstanding