ECONOMIC FORECAST FOR RIORDAN MANUFACTURING

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Riordan Manufacturing is a global plastics manufacturer with projected annual earnings of $46 million. The company is wholly owned by Riordan Industries. Riordan Industries is a Fortune 1000 enterprise with revenues in excess of $1 billion. Riordan Manufacturing is an industry leader in the field of plastic injection molding creating innovative plastic designs that have earned international acclaim. Riordan Manufacturing uses state-of-the art design capabilities in its processes to facilitate extreme precision and enthusiastic quality control. Riordan Manufacturing's products include plastic bottles, fans in all sizes, heart valves, medical stents, and custom plastic parts. The firm's major customers and markets include; automotive parts manufacturers, aircraft manufacturers, beverage makers and bottlers, appliance manufacturers, health care, and the Department of Defense. The firm has operations in Georgia, Michigan, California, and a joint venture in China and employs over 300 employees plus 250 employees in its joint venture in China. The firm's products include plastic beverage containers produced at its plant in Albany, Georgia, custom plastic parts produced at its plant in Pontiac, Michigan, and plastic fan parts produced at its facilities in Hangzhou, China. Research and development is done at the corporate headquarters in San Jose.

Economic Overview

The markets for plastic bottles, fans, and custom plastic parts are affected by changing economic conditions. As a result, it is the impact of the economy on Riordan Manufacturing's major customers and markets that must be analyzed in order to determine how the future direction of the economy will affect Riordan Manufacturing. Automotive parts manufacturers, aircraft manufacturers, and appliance manufacturers are all impacted by the strength of the overall economy, and appliance manufacturers are also affected by the strength of the housing market. Beverage makers and bottlers are impacted by changes in demand for the drink products that are contained in the bottles they produce, but overall demand for drink products is only marginally affected by the overall economy. In general, it can be assumed that a strong economy will support continued sales of the products produced by beverage makers and bottlers, but the competitive business decisions made by Riordan Manufacturing's customers are significant.

The demand for heart valves, medical stents, and health care services in general is primarily affected by demographic trends and the availability of health insurance. The question related to health insurance is too uncertain to analyze here. The demographic question is easier to address. The baby boomer group includes more than one-fourth of the population in the United States, and as it ages, it is natural to assume that the demand for health care services, including heart valves, medical stents, will increase as this demographic cohort ages.

The Department of Defense is another customer whose demand is largely unaffected by changing economic conditions. The ability of the Department of Defense to meet its current and anticipated obligations is affected by funding and appropriations. The Congressional Budget Office's March 2005 Baseline for Discretionary Spending for Defense indicates $422 billion in 2005 and $432 in 2006 following $486 billion in 2004 (figure impacted by the ongoing wars). These figures indicate continued strong levels of discretionary spending for defense.

Given the above, it is important to consider future economic conditions when planning for the next two years for the demand by appliance manufacturers, automotive parts manufacturers, aircraft manufacturers, and to a lesser extent beverage makers and bottlers. The focus here will be on real GDP growth, inflation, labor cost, and the value of the dollar, interest rates, and transportation and shipping costs (fuel prices). More detailed discussion related to the appliance, automotive parts, and aircraft markets will also be presented below.

Real Gross Domestic Product (GDO) Growth

The United States economy has shown some weakness during the first half of 2005. This weaker growth has led to a slight decrease in estimates for economic growth in 2005 and 2006. One reason for this relative weakness in the economy is the large and persistent trade deficit, a factor that continues to reduce estimates for economic growth. The high level of oil prices is another important contributor to weaker than expected economic growth early this year. Consumers are adjusting to the reality that oil prices will remain high rather than being a temporary event, and even if oil prices fall the decrease will be small. Another problem confronting the economy is the weak labor market. One last factor was the end of accelerated depression. On the positive side, consumer demand continued to be strong, and capital spending has been stronger than expected.

An important contributor to economic growth starting in 2001 has been very stimulative fiscal and monetary policies. We should expect slower increases in government spending, and possible tax increases in 2006 in order to reduce the government budget deficit from excessively high levels. At the same time, the Federal Reserve has been raising its target for the Federal Funds rate. This should continue throughout at this year. These policies should tend to reduce economic growth in the near future. The greatest immediate uncertainty is the impact of these policies on long-term interest rates. Long-term interest rates are more impacted by the bond market than Federal Reserve policy.

To summarize, the economy will continue to demonstrate slower but still a good level of economic growth. Consumer spending will moderate, capital spending should continue show relative strength, the housing market will slow only to strong rather than the very strong levels we see today. Lower oil prices will tend to support economic growth. A stabilizing factor for consumer spending will be the large increase in the net worth of households we have seen due to the strong housing market. Offsetting these positive trends will continue to be the sizeable trade deficit, slightly higher interest rates, and high levels of household debt.

Percent Change-Gross Domestic Product (GDP)	2004	2005	2006
Congressional Budget Office – January 2005	4.40%	3.80%	3.70%
Mortgage Bankers Association – May 2005	4.40%	3.40%	NA
National Association for Business Economics – May 2005	4.40%	3.40%	3.40%
RSQE Forecasts – May 2005	4.40%	3.30%	3.50%

The Value of the Dollar

The large trade deficit will lead to further declines in the trade weighted value of the dollar. This decline will lead to the dollar/euro exchange rate continuing to equal about 1.25 dollar to the Euro. Uncertainty due to the rejections of the constitution for European Union will lead to a short-term increase in the value of the dollar relative to the Euro, but this trend will not persist due to the trade deficit. The dollar should also lose value relative to the yen. It is expected that China will not maintain its currency peg with the dollar and as a result the value of the dollar will decline relative to China's currency, but this decline will not be significant. It is expected that foreign exporters, including those from China, will be will to accept lower profits rather than raising prices and risking losing market share. It is the persistently large trade deficit caused by the combination of the relatively strong economy in the United States, the relatively weak economies of the majority of our trading partners, and continued strong consumer spending in the United States, that will ultimately lead to a weaker dollar.

Real Trade-Weighted Value of the U.S. Dollar-Broad Index	2004	2005	2006
National Association for Business Economics – May 2005	99.8	96.0	94.2
RSQE Forecasts – May 2005 /1	99.8	95.2	90.3

Note:
/1 Based on the actual value in 2004 and forecasted percent changes.

Inflation Rate

High oil prices, and to a lesser extent the weaker dollar, are contributing to raised expectations for inflation. An expected decrease in the rate of increase in labor productivity is another factor that it contributing to higher inflation expectations. On the other hand, there are factors that are contributing to lower inflation expectations. These include the fact that while it is expected that the rate of increase in labor productivity will decline, productivity gains are still relatively good or at least on trend. Other important factors are the relatively weak labor market (wage gains should be small but on an increasing trend), the expectation that Federal Reserve policies will restrain inflation, strong competition in the retail market, and strong international economic competition. These factors all balance to forecasts for the inflation rate continuing to be less than 3.00%.

Percent Change-Consumer Price Index (CPI)	2004	2005	2006
Congressional Budget Office – January 2005	2.70%	2.40%	1.90%
Mortgage Bankers Association – May 2005	2.70%	3.00%	NA
National Association for Business Economics – May 2005	2.70%	2.80%	2.50%
RSQE Forecasts – May 2005	2.70%	2.90%	2.40%

Labor Costs

Labor costs are expected to increase during the course of the next two years. Continued economic growth will lead to higher payrolls and begin to exert greater upward pressure on wages. In addition, decreases in productivity growth to levels more consistent with long-term trends will lead to increases in labor costs per unit of output. Another important factor is the continued fact that the costs of providing benefits, especially health benefits, will continue to increase at an above average rate.

Unemployment Rate	2004	2005	2006
Congressional Budget Office – January 2005	5.50%	5.20%	5.20%
Mortgage Bankers Association – May 2005	5.50%	5.20%	NA
National Association for Business Economics – May 2005	5.50%	5.20%	5.10%
RSQE Forecasts – May 2005	5.50%	5.20%	5.00%

Percent Change-Employment Cost Index	2004	2005	2006
Congressional Budget Office – January 2005	2.70%	3.10%	3.30%

Percent Change-Private Nonfarm Compensation/Hour	2004	2005	2006
National Association for Business Economics – May 2005	4.50%	4.20%	4.40%

Interest Rates

The Federal Reserve is expected to raise the Federal Funds rate through the balance of this year. This will allow the Federal Reserve to raise short-term rates to a level that is considered "neutral" and will allow the Federal Reserve to have the flexibility needed to act if the economy weakens unexpectedly. This will contribute to restraining inflation in the face of continued economic growth and increases in inflation expectations due to high oil prices. The effect of this will be higher short-term lending rates.

Long-term interest rates should also increase but at a slower rate. The reason for this is continued relatively low inflation expectations discussed above. The biggest contributor to the low interest rates the economy has experienced recently has been relatively low inflation expectations. The reasons for this include the still relatively poor labor market, wage increases less than the inflation rate contributing to the expectation that aggregate demand will suffer in the future, domestic and foreign competition restraining price increases, and the belief that the Federal Reserve will act to control the inflation rate. The effect of the higher short-term interest rates identified above is slightly reduced rates of economic growth, a factor that will tend to reduce increases in long-term interest rates. Another important factor is continued demand for long-term U.S. Treasury bonds by foreign central banks and other foreign investors, an activity supported by the dollars received by foreign firms due to the large U.S. trade deficit discussed above. The impact of this is lower long-term interest rates. The reliance on foreign investors to support increased borrowing by the U.S. government and American consumers and firms may not be sustainable raising the risk that long-term interest rates may increase. This suggests that financing to expand operations, replace equipment, or other purposes, should be secured sooner rather than later.

Federal Funds Rate	**2004**	**2005**	**2006**
Mortgage Bankers Association – May 2005	1.35%	3.10%	NA
National Association for Business Economics – May 2005	1.35%	3.20%	4.00%
3 – Month Treasury Bill Rate	**2004**	**2005**	**2006**
Congressional Budget Office – January 2005	1.40%	2.80%	4.00%
RSQE Forecasts – May 2005	1.40%	3.10%	3.80%
10 – Year Treasury Rate Yield	**2004**	**2005**	**2006**
Congressional Budget Office – January 2005	4.27%	4.80%	5.40%
Mortgage Bankers Association – May 2005	4.27%	4.50%	5.10%
National Association for Business Economics – May 2005	4.27%	4.58%	5.20%
RSQE Forecasts – May 2005	4.27%	4.70%	5.40%

Fuel Prices

Oil prices at level above $50 per barrel as they are now are much higher than they were at this time last year. However, despite the significant increases in demand we have seen from China and India, it is expected that slower world wide economic growth and increases in supply should lead to prices below $45 per barrel by next year.

As reported in the May, 2005, *NABE Outlook*, a National Association for Business Economics panel's average response to a request for a forecast of the price of West Texas Intermediate oil (WTI) at the end of calendar year 2005 was $46.17 per barrel. This compares to prices that are currently in the range of $50 to $55 per barrel. RSQE Forecasts reported in their report, *The U.S. Economic Outlook for 2005-2006, Executive Summary: May 2005*, the expectation that the average price per barrel will fall to $47 per barrel by year-end 2005 and $38 per barrel by year-end 2006.

Jet Fuel Prices (FY 2004 $)	**2004**	**2005**	**2006**
Federal Aviation Administration	101.73	126.96	117.38

Appliance Manufacturers

Sales of appliances are influenced to a great extent by the strength of the housing market. People tend to purchase new household appliances when they purchase a new or existing home. Given this, it is important to evaluate the housing market and its future strength. The strength of the housing market during recent years has been fueled by low interest rates. Other factors include the relatively strong economy, increasing home prices, uncertainty related to the financial markets since the stock market bubble burst in 2000, and moves to perceived secure assets after 9/11. The future strength of the housing market will also be affected by changes in these factors. Since relatively low interest rates have been the greatest contributor to the strength of the housing market, the future strength of the housing market will also be affected by changes in interest rates in the future.

30 – Year Fixed Rate Mortgage	**2004**	**2005**	**2006**
Mortgage Bankers Association – May 2005	5.80%	5.90%	6.30%
National Association of Homebuilders – May 2005	5.80%	5.90%	6.60%
RSQE Forecasts – May 2005	5.80%	6.10%	6.80%

As of June 3, 2005 the 10-Year Treasury rate Yield equaled approximately 3.95 percent, the 30-Year Fixed Rate Mortgage rate equaled 5.65 percent, and the 15-Year Fixed Rate Mortgage rate equaled 5.25 percent. Given the above forecasts, and conditions that should tend to limit further increases in the inflation rate, I expect only marginal increases in the 15 and 30-Year mortgage rates between now and the end of this fiscal year, and only .75 to 1.00 percentage point increases in mortgage rates by the end of Fiscal Year 2006. This implies continued strength in the housing market.

Housing Starts (Thousands)	**2004**	**2005**	**2006**
Mortgage Bankers Association – May 2005	1,952	1,947	1,790
National Association of Home Builders – May 2005	1,952	1,936	1,820
National Association for Business Economics – May 2005	1,952	2,000	1,800
RSQE Forecasts – May 2005	1,952	2,007	1,894

These forecasts, when compared to historical data, indicate the expectation that the national housing market will continue to be relatively strong. It is likely that there will be real estate markets that will experience weakness due to the potential for corrections or declines in home prices. If this occurs, this will largely be confined to markets on the west coast, Florida, and some markets in the New England area. It is suggested that these local markets be monitored in order to plan sales and marketing efforts. Overall, it the data and forecasts related to long-term interest rates and mortgage rates, and housing starts, is positive in the near term suggesting that the demand for appliances will continue to be strong.

Automotive Parts Manufacturers

Sales of automotive parts are greatly affected by light vehicle sales, a variable that is greatly affected by changes in real GDP. Projections are for little change in sales of light vehicles. The reason for this is the expectation that economic growth measured by changes in real GDP should be moderate, and interest rates are expected to continue to be relatively low. These conditions are good for consumer spending on all items, including automobiles and other light vehicles. The important risk to monitor is a decrease in domestic automobile production due to weak sales.

Light Vehicle Sales (Millions of Units)	**2004**	**2005**	**2006**
National Association for Business Economics – May 2005	16.8	16.7	16.8
RSQE Forecasts – May 2005	16.8	16.8	17.1

Aircraft Manufacturers

The details presented above relate to overall economic conditions and interest rates supports continued purchases of new aircraft by airliners and other businesses. The economy will continue to demonstrate relatively slow if not spectacular economic growth. Consumer spending will moderate, but the trend continues to be positive. The inflation rate will be less than 3.00%, low enough to not pressure consumers too much to limit airline travel. Short and long-term interest rates are both expected to increase only moderately. This suggests that financing the acquisition and construction of aircraft will continue to be feasible. Finally, relatively high fuel prices will continue to encourage the purchasing of new aircraft to promote fuel efficiency and reduce costs. This indicates continued strong demand for Riordan Manufacturing's products by aircraft manufacturers. The following forecasts by the Federal Aviation Administration support these trends.

Passenger Jet Aircraft – Total Jets	**2004**	**2005**	**2006**
Federal Aviation Administration	4,046	4,151	4,320
Cargo Jet Aircraft	**2004**	**2005**	**2006**
Federal Aviation Administration	974	996	1,011

Summary

The data presented to this point indicates positive economic conditions for Riordan Manufacturing and opportunities to leverage relatively low interest rates into new investments to enter new markets and increase productivity. Economic growth is expected to be steady, although at a lower rate than 2004 level of 4.40% growth in real GDP. The inflation rate may decline, and interest rates will increase moderately. Oil prices are expected to fall, and as a result, reduce transportation and shipping costs. The value of the dollar will decline, marginally improving export opportunities. If China removes its practice of pegging its currency to the dollar then sales by the China joint venture may decline a little but not significantly. The labor market should strengthen and this will result in larger payrolls nationally and higher labor costs for Riordan Manufacturing, but also will support consumer spending. The appliance and aircraft markets are expected to continue to be strong. Projections for sales of automobiles suggest consistent sales of automotive parts, but Riordan Manufacturing should expect pressure from domestic automakers to cut costs. Continued sizeable increases in the costs of providing employee benefits are highly likely to continue. Despite this particular issue related to costs, the stable economy described in the forecast presented above should provide for the basis to at least meet the firm’s sales goals.

Sources for reputable forecasts include:

1. **Mortgage Bankers Association of America** includes mortgage finance information and economic forecasts. This is a resource for information related to residential finance, commercial and multifamily finance including industry surveys and statistics, state and local Mortgage Bankers Association initiatives, and conferences. Mortgage and market data including interest rate data, reports on housing activity, special reports are also available. The address is: http://www.mbaa.org/
2. **National Association of Homebuilders** Resources here includes economic and housing data including economic forecasts. Additional information include details about NAHB, Home Builders Institute, NAHB Research Center, National Housing Endowment, publications, news, and resources related to land development and housing. The website address is: http://www.nahb.com/
3. See the **Congressional Budget Office** for current budget and economic forecasts, publications, and other budget and economics information. The website address is: http://www.cbo.gov/
4. **RSQE Forecasts** is another source for economic forecasts and other economics information. RSQE Forecasts is published by Research Seminar in Quantitative Economics, University of Michigan. The website address is: http://rsqe.econ.lsa.umich.edu/
5. **National Association for Business Economics (NABE)** is an excellent resource for professional economics. Membership in NABE is required to view forecasts and other resources. The website address is: http://www.nabe.com/

6. **Federal Aviation Administration** is an excellent source for economic forecasts, and forecasts and actual data related to the aviation industry. The website address is: http://www.faa.gov