SJR 64: Joint Subcommittee Studying Manufacturing Needs and the Future of Manufacturing in Virginia
August 17, 2004, Richmond

The Joint Subcommittee Studying Manufacturing Needs and the Future of Manufacturing in Virginia pursuant to Senate Joint Resolution 64 held its first meeting on August 17. Senator Frank Wagner was elected chairman and Delegate Bob Purkey was elected vice chairman. The joint subcommittee was established to consider the needs of the Commonwealth's manufacturing sector by assessing its current state and to determine how its needs may be best addressed.

Status of Manufacturing Sector

Though the relative size of the manufacturing sector in Virginia's economy has been in decline for several years, it remains vitally important to the Commonwealth's economy. Since peaking at 432,500 in 1989, Virginia's manufacturing employment has fallen to 296,600 in June 2004. Over 67,000 manufacturing jobs in the state have been lost in the past four years alone. Manufacturing's share of nonagricultural employment, which was 28.6 percent in 1949, currently stands at 8.7 percent. The number of manufacturing establishments has declined from 6,908 in 2001 to 6,086 in the fourth quarter of 2003.

Other indicators of the health of the Commonwealth's manufacturing sector are not as bleak. Virginia's average weekly earning for production workers has risen form $435 in 1992 (which was 93 percent of the national average) to $622 in 2002, which exceeded the national average by $3. Average annual wages for Virginia's manufacturing sector, at $39,089, exceed the average of $36,750 for all private employment sectors in this state. Since 1989, manufacturers have been producing more with fewer employees. The amount of value added by Virginia manufacturing increased from $43.6 billion in 1997 to $53 billion in 2001.

Despite the declining numbers of manufacturing establishments and employees in the Commonwealth, the sector remains important. The aggregated personal income in the manufacturing sector exceeded $16 billion in 2002. Manufacturing's share of the state's economy was 12 percent in 2001, and its contribution to the state's economy topped $32 billion.

Cost Pressures on Manufacturers

Dr. Thomas J. Duesterberg, president of Manufacturers Alliance/MAPI, advised the joint subcommittee that while the nation's manufacturing sector is in a recovery phase, many challenges remain. The purpose of manufacturing is evolving from making products to providing "solutions" that incorporate such services as product design, engineering, marketing, and organization. Technological improvements are critical to maintaining competitiveness and productivity growth. The manufacturing sector is leading in innovation and productivity, as 70 percent of business sector research and development (R&D) comes from the manufacturing sector.

Competition from foreign manufacturers has limited the ability of U.S. manufacturers to pass on increasing costs to consumers. Manufacturers Alliance/MAPI has quantified the effect of

policies with respect to corporate taxation, employee benefits, tort costs, natural gas costs, and pollution abatement costs on manufacturing's raw costs for firms in the U.S. and its nine largest trading partners. In 2002, the effect of these "overhead" costs produced an effective cost index of $24.20 per hour for the U.S., which is $8.28 more than the $16.02 per hour average for the nine trading partners. The U.S. effective cost index is exceeded only by those for Germany ($29.27) and France ($25.77). The leading trade partners with the lowest effective cost indices are China ($3.50) and Mexico ($6.19).

In addition, the strong dollar has imposed a 0.8 percent burden on U.S. manufacturing's raw cost competitiveness relative to its nine largest trading partners from 1990-2003. Dr. Deusterberg's recommendations include allowing currencies to seek optimal values, reducing regulatory and tort litigation costs, increasing oil and gas exploration in North America, reducing the corporate tax burden, attacking increasing health care costs, increasing access to foreign markets, and improving the climate for innovation and technology development.

Dr. Deusterberg's ranking of Virginia's business tax climate as the 21st best state prompted substantial interest. Virginia's tax system ranked below average with respect to its individual income tax component and the conformity of its tax base to the federal base.

Impact of Supply Chain of Manufacturing Support Firms

Richard Kelly, vice president of purchasing at Philip Morris USA, reported that a strong manufacturing sector benefits many other economic sectors. In the case of Philip Morris, its supply chain includes 1,100 suppliers of products and services and over 1,600 tobacco growers in Virginia. In 2003, Philip Morris spent $850 million on goods and services from firms with establishments in Virginia and $300 million on tobacco-related purchases in Virginia. In 2002, the corporation exported $1 billion in goods, primarily through Virginia ports, while importing $320 million of supplies through Virginia ports.

The length and breadth of the supply chain benefits many economic sectors, including transportation, finance and insurance, and retail and wholesale trade. Strengthening the manufacturing sector would raise the overall economic tide in Virginia.

Importance of Technology-Intensive Manufacturing

Sarah Butzen of Regional Technology Strategies, Inc. (RTS) provided the joint subcommittee with the results of its 2001 report on the performance of Virginia's technology-intensive manufacturing community. The report, prepared for Virginia's Center for Innovative Technology, also identified public policy directions and actions that would advance the competitiveness and growth of Virginia's existing technology-intensive manufacturing community and make Virginia more attractive to such firms.

RTS found that much of the decline in manufacturing employment is due to increased productivity, as manufacturers need fewer employees to produce a given increase in output. Similarly, manufacturing's share of the gross domestic product is declining as a result of increasing efficiency in production, which allows manufactured goods to be sold at increasingly

lower costs, which results in lower expenditures on manufactured goods relative to the amounts spent on services.

Ms. Butzen noted that research and development is the single strongest predictor of GDP growth, and that manufacturing counts for 80 percent of all industrial R&D and 60 percent of total R&D. Manufacturing innovation drives innovation and growth in other sectors of the economy. The services sector benefits from R&D performed by Virginia's manufacturing industries. The benefits of R&D are spread through technology diffusion, through which firms acquire, adapt, and apply the technological advances created in other firms and other industries. Manufacturing innovations are particularly conducive to technology diffusion because of the close supply linkage among many manufacturing industries.

The clustering of technology-intensive manufacturing firms in geographic locations fosters technology diffusion and knowledge "spillovers," thereby benefiting the entire region. In making location decisions, manufacturers with significant R&D activity tend to locate at sites that are adequate for the manufacturing processes while simultaneously attracting and retaining the necessary scientists, engineers and technicians. Virginia's technology-intensive manufacturing industries have made significant gains in output and productivity. However, Virginia has a smaller percentage of its workforce engaged in technology-intensive manufacturing than the national average.

RTS identified four policy recommendations. First, Virginia should craft and implement a separate statewide development strategy to advance the technology-intensive manufacturing community. Second, private sector R&D should be encouraged through tax credits customized to motivate and support R&D expansions for technology-intensive manufacturers and by the establishment of a single gateway for information and access to government resources. Third, the state should focus on recruiting and retaining technology-intensive manufacturers in order to boost R&D activities. Finally, strategic partnerships or alliances, including research relationships between technology-intensive manufacturers and state universities, should be encouraged.

Strategy for Growth and Manufacturing Renewal

The Virginia Manufacturing Association (VMA) developed the Virginia Strategy for Growth and Manufacturing Renewal, which identifies 12 priority areas of concern to manufacturers. VMA president Brett Vassey presented the Strategy to the joint subcommittee. He urged Virginia to focus on developing rules and legislation to the growth of technology-intensive manufacturing. From the 12 points identified in the Strategy, Mr. Vassey asked the joint subcommittee to focus on six threats to manufacturing competitiveness: taxation, health care costs, research and development, regulation, education, and transportation.

Next Meeting

The joint subcommittee indicated that it would examine four of these issues: taxation, research and development, regulation, and health care costs. The joint subcommittee's second meeting will be held in November in the Lynchburg area. At that time, members are expected to receive the results of a study by Ernst & Young that compares the burden of Virginia's state and local

taxation of the manufacturing sector with other economic sectors in Virginia, as well as with the burdens on such sectors in several other states.

The joint subcommittee will examine the issue of ownership by Virginia's public universities of intellectual property developed at the institutions through research sponsored by private entities. Other issues to be addressed include energy costs and federal and state requirements for analyses of the impact of proposed regulations on small businesses. Finally, the manufacturing sector was tasked with coming forth with ideas to curtail increases in the health care costs for their employees.

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