

# Memorandum

**Date:** November 26, 2006(revised from Nov. 14)

**Subject:** McSwain Carpets & Floors Labor Productivity

**To:** Matt Ford

**From:** Jennifer Pille

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## Introduction

As requested, productivity of the McSwain Carpets & Floors has been investigated. The focus of the investigation was on labor productivity from 2005 to 2006. Findings are compared to national productivity data.

## Findings

**Productivity results.** Partial productivity with respect to labor increased 1.87% from 2005 to 2006.

**National comparison.** Although McSwain's productivity increased it is lower than the nonfarming business sector's projected national average of labor productivity for the last ten years, which is 2.8%.

**Better knowledge.** Develop an internal system to measure the production of labor within our company each quarter, and then compare this data to other competing companies.

## Discussion

**Method.** A six week sample of output and input from 2005 and 2006 were obtained from McSwain Carpets & Floors accounting department. Partial productivity (output/input or yds. installed/crew hours) was calculated for the labor factor of production because our resource is labor. Percent difference in productivity year over year was then determined and compared to US nonfarming business data. McSwain Carpets & Floors operation is primarily involved in the nonfarming business sector due to McSwain being a service industry. Therefore the comparison to US nonfarming productivity data appears most relevant.

**Productivity Results.** McSwain Carpet & Floors productivity data appear in Table 1. Partial productivity, where output is compared to a single resource, was determined for production. Percent difference in productivity for 2005 and 2006 are also shown in Table 1. This shows that partial labor productivity has increased since 2005 by 0.85%.

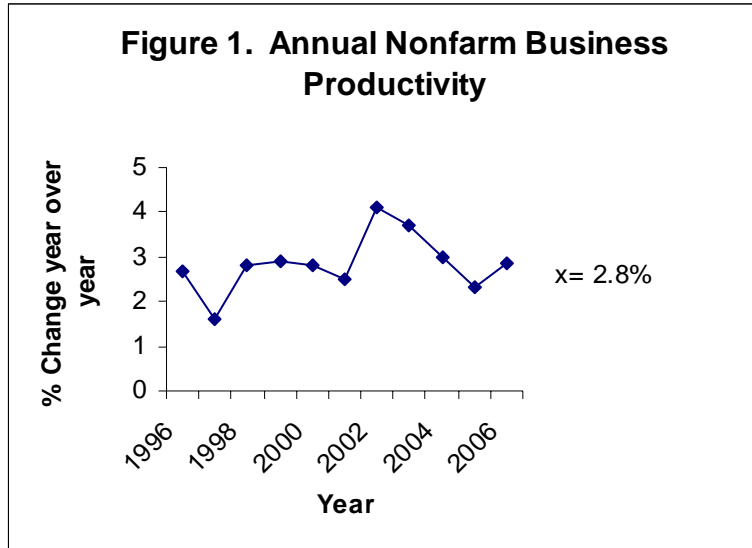
Table 1. Percent Difference in Productivity for 2005 and 2006 for McSwain Carpets & Floors

Productivity	2005	2006
<i>Output/Input Data</i>		
Yards installed		
Wk. 1	670	940
Wk. 2	955	702
Wk. 3	485	968
Wk. 4	937	500
Wk. 5	690	696
Wk. 6	490	500
<b>Total</b>	<b>4227</b>	<b>4306</b>
Labor(hrs)		
Wk. 1	120	160
Wk. 2	160	120
Wk. 3	80	160
Wk. 4	160	80
Wk. 5	120	120
Wk. 6	80	80
<b>Total</b>	<b>720</b>	<b>720</b>
<i>Partial Productivity</i>		
Labor(hrs)	5.87	5.98
<b>% Change</b>	<b>1.87%</b>	

Note: Partial productivity=output/single resource  
 Source: McSwain Carpets & Floors accounting office

**Outside Comparisons.** The Bureau of Labor Statistics is the most widely tracked national productivity data of productivity series, which is produced quarterly and annually. They track this data so that companies can use this data as a tool to compare their labor production with others. Various sectors generate output and is compared to the number of corresponding labor hours. Note that this is partial factor productivity, and regrettably cannot be used to conclude the productivity of other factors of production such as capital, raw materials, energy, and land.

McSwain Carpets & Floors is classified in the nonfarming business sector because the company provides a service and not just a product. Figure 1 represents the nonfarming business sector's percent change in productivity annually. It shows that the annual percent change average for the last ten years has been between 3% and 4%. McSwain Carpets & Floors productivity continues to increase each year compared to other benchmarks, whose productivity also is increasing each year.



**Obtaining better knowledge.** Developing a system to measure the production of labor production within competing companies is recommended. Such a system would provide our employees greater credentials and the ability to produce higher levels of labor productivity through management. Employees could become motivated when seeing the competitors data produced by the employees manager. A system that combines both tabular data (similar to Table 1) with representation of changes over time (like Figure 1) should suggest a valuable management tool for understanding labor productivity, and measures labor productivity monthly, quarterly, and yearly. Our company’s ability to properly train employees on obtaining a higher labor production percent would make us more knowledgeable also.

**Limitations.** Only a data sample of six weeks of production was given. Therefore, the data could be unsound due to the small sample size. Not having other factors of production also limits us to bias information when analyzing production. Issues related to crew size may occur. Each week the crew size changed, therefore possibly changing the amount of productivity. The crew size does need to vary in order to evaluate crew size effects, but this could cause the data to be insufficient. A study based on crew size is not available at this time, but if a study were done in the future this could allow for sufficient data concerning productivity.

**MF comment:** Only thing I would have added is a full, footnoted citation of the specific source of the BLS data. Class website resources include how to generate these citations in your reports.