

Assessing tax 2012 tax rate benchmarking study for industrial products and services companies

*Special report:
Transfer pricing*



Welcome to the 2012 edition of Assessing tax, a benchmarking study for industrial products and services companies. This year's report provides a detailed analysis of tax rate metrics for 324 companies to highlight trends for the companies overall and by sector. Tax rate benchmarking can give company executives valuable data and insight into their tax functions, helping them to evaluate departmental strategy and performance.

This year's edition begins with a special report on transfer pricing in the context of globalization, supply chain management, and merger and acquisition activity. For industrial products and services companies that are doing business in and with emerging economies, the implementation of an effective transfer pricing program has become an important and challenging aspect of tax strategy.

Table of contents

Special report: 2

Transfer pricing

Benchmarking overview: 6

Tax rate benchmarking for industrial products and services companies

Benchmarking by sector: 12

Tax rate benchmarking overview for key sectors

- ① Tax rate benchmarking for the aerospace and defense sector 12
- ② Tax rate benchmarking for the chemicals sector 17
- ③ Tax rate benchmarking for the engineering and construction sector 22
- ④ Tax rate benchmarking for the industrial manufacturing sector 26
- ⑤ Tax rate benchmarking for the metals sector 31
- ⑥ Tax rate benchmarking for the transportation and logistics sector 35

Appendix: 39

Methodology

Special report:

Transfer pricing

Introduction

Transfer pricing—the allocation of income and expenses between members of a controlled group involved in cross-border transactions—has become an extraordinarily challenging subject for multinational companies as well as for tax authorities and governments seeking to protect their tax base from erosion. The basic rule in transfer pricing is the arm’s-length principle, which requires the allocation of income and expenses between related parties to reflect the outcome that would be achieved if the two parties were unrelated and dealing at “arm’s length.” While the concept is simple, its application can be extremely complex and controversial; and the allocation of income and expense between related parties can be a significant determinant of a multinational company’s effective tax rate (ETR).

For industrial products and services companies, transfer pricing is a critical area of focus, in part because of the expansion of companies in this sector into emerging markets. In this article, we explore the implications of globalization and other key business trends on transfer pricing considerations.

Globalization

Industrial products companies have witnessed a significant shift in production to emerging markets, including most notably China, Brazil, and India. Today, multinational enterprises in the sector continue to extend the breadth of their existing international operations while expanding into new markets to be closer to their customers. These companies are looking to emerging markets as sources of not only low-cost labor for manufacturing, but also highly skilled labor that will help drive development activities. In addition, emerging markets also are expected to propel future growth through lucrative new sales channels.

The chemical and industrial manufacturing sectors are good illustrations of the impact of globalization. Many US-based chemical companies are building production facilities in emerging markets to meet overseas demand growth. There has been a large increase in investment in China, with two chemical companies recently announcing plans to increase their research and development (R&D) capabilities in Shanghai. In industrial manufacturing, foreign trade and investment is becoming increasingly important as demand from emerging markets is growing faster than in the United States and Europe as a result of higher birth rates, improving living standards, and increasing industrialization of their economies.

The impact of globalization on transfer pricing

As a result of globalization, transfer pricing is becoming a more important as well as a more complex issue for industrial products and services companies. As these companies expand their global operations, they must develop robust and defensible transfer pricing structures and policies. They must deal with the growing number of jurisdictions that have adopted rigorous transfer pricing policies that, at times, rely upon inconsistent intercompany transfer pricing laws and standards. Multinationals also must respond to more aggressive enforcement by tax authorities—a consequence of the attempt by many countries to prevent perceived abuses by taxpayers and a desire for increased revenues to reduce deficits.

These developments are taking place both in developed and emerging countries. Indeed, the transfer pricing landscape throughout the world is constantly evolving, evidenced by the release of final US cost sharing regulations on December 16, 2011; new transfer pricing regulations in Russia, effective January 1, 2012; and Hong Kong’s formation of an Advance Pricing Agreement (APA) program on March 29, 2012.

Multinationals must comply with material differences in transfer pricing rules across multiple jurisdictions. In certain countries, such as

Brazil (a major market for industrial products), companies must comply with transfer pricing rules that do not adhere to the arm's-length principle. The Brazilian transfer pricing regime is a formulary-based system that defines maximum price ceilings for deductible expenses on intercompany import transactions and minimum gross income floors for intercompany export transactions. This regime creates a unique challenge for multinationals operating in Brazil, since transfer pricing requires analysis under two distinct models that cannot necessarily be reconciled. In such instances, double taxation may be inevitable. This expansion of businesses across national borders, and the proliferation and inconsistency of transfer pricing rules worldwide, will likely lead to a dramatic increase in transfer pricing controversies.

Due in large part to the global economic downturn, transfer pricing in recent years has been an exercise in the allocation of losses, rather than income, among related entities. Meanwhile, the governments auditing these companies are looking for tax revenues to help offset the cost of deficit spending during the downturn. These factors have created an environment that is ripe for tax controversy. Indeed, multinationals have been confronted by enhanced tax compliance enforcement activity throughout the world, including intense attacks on their in-country "loss operations."

The risk of double taxation

Many multinationals are looking for ways to protect themselves from the risk of double taxation that could arise in a transfer pricing controversy. Traditionally, companies relied on preparing robust transfer pricing documentation to support their tax return filing positions. However, in today's more contentious transfer pricing environment, many companies are exploring APAs and other forms of dispute resolution, such as joint audit examinations or the competent authority pricing process, to avoid or resolve transfer pricing controversies.

The APA—an agreement between the taxpayer and tax authority that sets out the method for determining the transfer pricing for the subject transactions over an agreed time period—can be used to help gain a level of certainty on existing structures for future years as well as to implement new transfer pricing policies coinciding with a business restructuring. Despite the benefits of achieving certainty, some multinationals have been reluctant to enter into the APA program, believing that APAs can be invasive, costly, and time consuming.

In response to concerns from multinationals for consistency and efficiency in audit processes in different countries and minimizing the risk of double taxation, there appears to be a gradual shift from adversarial to

collaborative approaches to resolving tax disputes. Indeed, collaboration is also increasing between tax authorities, including an increased willingness on the part of tax authorities to share information in order to reach mutually agreed upon outcomes with taxpayers. Some countries are beginning to offer joint audit examinations—a coordinated single audit using a single team comprising representatives from two or more jurisdictions—although these joint audits have not yet gained widespread traction. In cases involving tax disputes between treaty partners, the competent authorities of the relevant countries may be engaged to resolve the dispute under the mutual agreement procedures embodied in the relevant income tax treaty.

Intangibles in a global economy

Globalization also has resulted in a wide array of issues involving the ownership and use of intangible property. As companies expand internationally, they often seek to align the ownership and use of intangible property in a regional headquarters through cost sharing, licensing, or contract service arrangements.

Under a cost sharing arrangement, each participant in the arrangement is a co-owner of intangibles with certain rights to their use. However, recent US regulations regarding cost sharing arrangements have made these structures administratively

burdensome. In addition, for many companies in the industrial products sector with valuable, self-developed intangibles, the buy-in payment by a new participant upon the formation of a cost sharing arrangement potentially could give rise to a significant tax expense.

As an alternative to cost sharing, many industrial products companies have adopted licensing models, under which ownership of the group's intangibles are retained by the owner and licensed to affiliates within the group. Licensing models also can prove challenging in certain jurisdictions, where foreign currency exchange or other limitations hamper the ability to make royalty payments or subject such payments to significant withholding taxes.

Supply chain management

Many US-based customers of industrial products companies are moving their operations to regions with faster growth or lower costs, forcing suppliers to move with them. To meet these global shifts, industrial products companies are re-examining their supply chain management strategies.

Lean manufacturing, which revolves around concepts of continuous improvement and innovation, waste elimination, and the reduction of total costs, continues to gain traction as companies struggle to maintain margins in a highly competitive

business environment. Companies are standardizing and simplifying their product mixes and aligning their products and services with global macroeconomic trends, such as increasing needs for global infrastructure, clean and renewable energy and energy efficiency, and a more mobile, networked society. Manufacturing companies also are developing a regional approach to manufacturing, product development, and sourcing, which makes them more responsive to local demands and less of an outsider to their customers.

Global placement of R&D and human resources

As demand for products increases in emerging markets, the need for local distribution channels to satisfy local demand is also increasing. Meeting local demand often requires knowledge of local consumer preferences, which, in turn, may necessitate a build-up of local R&D capabilities to ensure that product innovations are aligned with consumer preferences. This change in R&D investment brings with it the need to consider carefully how to structure the ownership of any intangible property, especially since some countries have weak laws in regard to intangible property protection.

Another important element in managing a global supply chain is the workforce, including the recruitment of skilled employees in multiple locations. The industrial products

sector as a whole faces a growing shortage of talent in many disciplines, including design engineers, project managers, superintendents, and middle and senior management, leading to intense competition among companies to hire qualified people. While this trend has been somewhat offset recently by lower demand due to the recession, it remains relevant for the longer term as knowledge and age gaps within the workforce continue to grow. To be successful in tight labor markets, all global companies have to provide additional incentives to potential employees by offering global training, rapid promotions, and attractive remuneration packages.

Increased controversy around restructured supply chains

In reaction to supply chain reorganizations by multinationals in pursuit of growth opportunities in emerging markets, some tax authorities in developed countries have sought to protect their tax base by challenging the movement of operations to emerging markets that offer more attractive growth opportunities. These tax authorities argue that reorganization constitutes a "transfer" that should give rise to an exit charge. It is important, therefore, for companies to consider the operational changes that must accompany a business restructuring.

More specifically, the restructured supply chain must carefully reflect

the intended shift in functions, assets, and risks among the parties. The significance of this tax issue is highlighted by the recent release of Chapter IX on Business Restructurings in the Organisation for Economic Co-operation and Development Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (OECD Transfer Pricing Guidelines). While the OECD Transfer Pricing Guidelines suggest that such restructurings will be disregarded or re-characterized only in exceptional circumstances, companies should expect challenges relating to the economic substance and business purpose of such restructurings. Accordingly, when considering an internal business restructuring, multinationals are advised to clearly demonstrate the business purposes and economic advantages relating to the restructuring.

Mergers and acquisitions (M&A)

Due to recent challenges in creating organic growth, industrial products companies with strong balance sheets have taken the opportunity to acquire the stock or business assets of other companies at competitive prices. For some companies seeking to streamline operations and remove non-core assets, divestment has been an attractive option. During the economic recession, deal volume and value declined in most industrial products sectors, including chemicals, metals,

industrial manufacturing, transportation and logistics, and engineering and construction. As the economy continues to recover, with improved balance sheets indicating more internal financing capability, and healthier capital markets providing more external financing, there is an expectation that M&A activity will continue to increase.

More robust M&A activity brings with it several pre- and post-acquisition transfer pricing considerations. Prior to an acquisition, a detailed due diligence review is needed to ensure the target company does not have any material transfer pricing exposures that could have a significant negative impact on the acquiring company going forward. In particular, during the due diligence phase, the acquiring company should look for exposures arising from non arm's-length pricing, lack of transfer pricing documentation, inconsistent transfer pricing policies or application of policies, as well as the status of any rulings or APAs that may remain in effect subsequent to the acquisition. The acquiring company also has to consider how the transfer pricing policies of both companies can be unified going forward.

Some of the largest business focused transfer pricing opportunities that arise in connection with M&A deals occur during the post-acquisition phase. During this time, companies evaluate the transfer pricing policies of both the target company and

the acquiring company and look for ways to harmonize the structures. When determining the optimal transfer pricing structure going forward, companies should consider any historical audit exposures, existing APAs, cost sharing arrangements, and tax authority rulings. The post-acquisition phase also may be an appropriate time to consider operational changes for the acquiring company, such as centralizing operations or intangible property, as well as evaluating the current supply chain structure. The post-acquisition period presents an excellent opportunity for a company to structure its intercompany pricing for the future in a way that is consistent with its operational and financial objectives.

Conclusion

Companies in the industrial products sector are expanding into emerging markets, re-examining their supply chain management strategies, and participating in global M&A activity. As a result, transfer pricing has become a critical area of focus for them. While the financial statements of the companies surveyed in the attached tax rate benchmarking study do not specifically discuss transfer pricing, transfer pricing can have an important impact as company operations expand globally.

Benchmarking overview:

Tax rate benchmarking for industrial products and services companies

This section of the *Assessing tax 2012* report provides overall highlights and trends in tax ratios for global industrial products and services companies as well as detailed analysis and commentary for each sector. The report covers the following six sectors: aerospace and defense, chemicals, engineering and construction, industrial manufacturing, metals, and transportation and logistics.

In this study, we benchmark the effective tax rate (ETR) in our six sectors and examine some of the key drivers of those rates. This information provides executives with an overview of the ETRs for their industry and can provide insight on how a company's ETR compares to its peers. Knowing where you stand in comparison with those around you is an invaluable asset, especially during a time of rapid change.

All industrial products and services sectors have faced uncertainty in a volatile business environment. It is anticipated that the recovery that started in 2011 will continue, although it may be uneven. Our analysis shows stronger recovery in the chemical and industrial manufacturing (IM) sectors than in the engineering & construction (E&C) sector, where conditions are still challenging for some companies.

This study uses publicly available data for the past three years up to December 2011. We reviewed key tax ratios for 324 industrial products companies and collated and analyzed the data to highlight trends by year and by sector. Data were sourced from data providers and from individual company reports. A customized report based on this study can be prepared for any company on request, comparing a company's key tax ratios against those of its peers. Such a benchmarking report can be used for internal management purposes (to incorporate into your company's tax strategy, or identify whether the drivers of the ETR for your company are different from those in your sector) and for communicating with your board on your company's ETR compared with other comparable companies.

This study shows a high-level analysis of key tax ratios, with no adjustment for one-time distorting items or losses. While losses, tax refunds, and exceptional items can serve as drivers of an individual company's tax ratios, our use of a statistically trimmed sample minimizes the impact of these drivers on our conclusions.

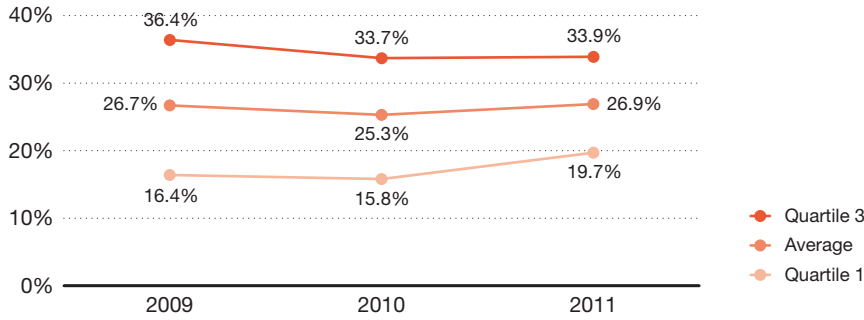
ETR for all companies

The ETR is the tax provision as a percentage of profit before tax, as taken from the face of the income statement. It provides a basic view of the impact of tax on results.

We calculated a trimmed average ETR, excluding extreme values from both the top and bottom of the data set. The upper and lower quartiles represent the resulting ratios for which 75% and 25% of companies fall below that point, respectively (see appendix for further explanation). The average three-year ETR of industrial products companies is 26.3%. The rate in 2011 (26.9%) is higher than that in 2010 (25.3%); Quartile 3 remained at a similar level to 2010, but Quartile 1 increased, with the result that the range between the quartiles decreased. The decrease is from 20.0 percentage points in 2009 to 14.2 percentage points in 2011, due in part to the recovery in the sector. As fewer companies incurred losses with associated tax benefits, there was less volatility in the ETR.

(See Figure 1)

Figure 1 – Effective tax rate for all companies



The recovery affected the various sectors in different ways. Engineering and construction had the greatest percentage of companies incurring losses in 2009; recovery for this sector has been slower than for other sectors. In contrast, 20% of the chemicals companies incurred losses in 2009, but all companies were profitable in 2011. The aerospace and defense sector was the least affected by the economic downturn, since governments are a major buyer of output from this sector. (See Figure 2)

The pattern of the companies with tax benefits largely follows the pattern of losses and causes volatility in ETR. The number of percentage points between Quartile 1 and Quartile 3 gives an indication of the range in which the majority of ETRs lie. Figure 3 shows the range between the quartiles for each sector.

This graph shows the increased volatility in the engineering and construction and transportation and logistics sectors and highlights the narrower range of ETRs in the other sectors.

Figure 2 – Percentage of companies in each sector incurring losses or tax benefits

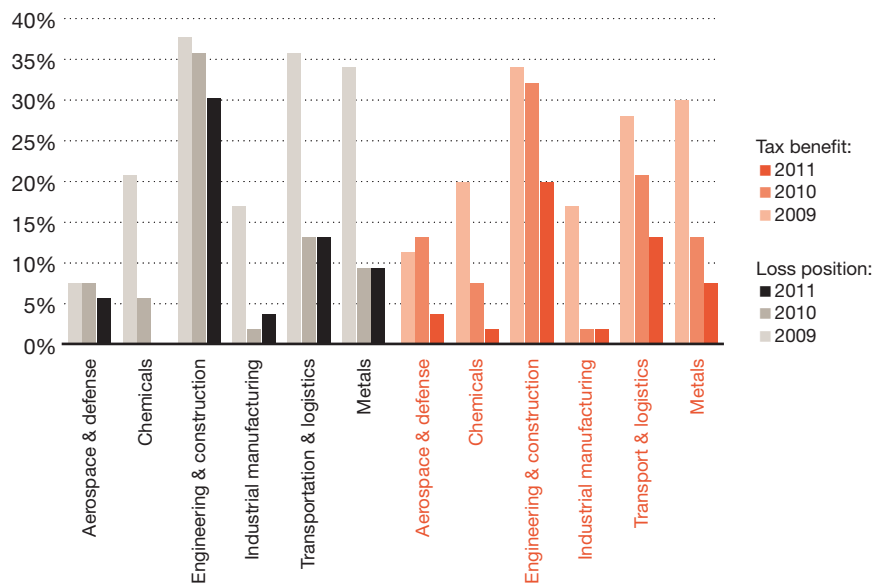
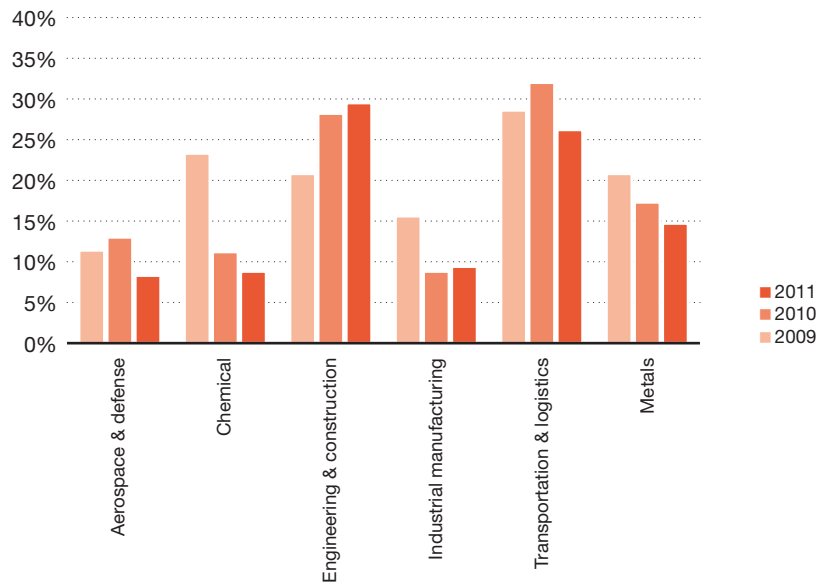


Figure 3 – Range between Quartile 3 and Quartile 1



ETR for profitable companies

Figure 4 shows the ETR trend when all companies that incurred losses or have been in a tax benefit position in any of the last three years are removed. There is a small movement in Quartile 1 from 2010 to 2011, and reductions in the ETR in both the average and upper quartile over the same period. This could be due to reducing corporate income tax rates around the world.

ETR by sector

We reviewed the ETR by sector for all companies and for profitable companies. Figure 5 shows that the ETR for transportation and logistics and engineering and construction companies rank at the bottom of the sector group; but the ETR for profitable companies in these sectors rank at the top of the group, a result of the volatility caused by losses. Aerospace and defense companies show the smallest difference between the two ETR calculations, since losses are less significant for this sector.

Figure 4—ETR for profitable companies

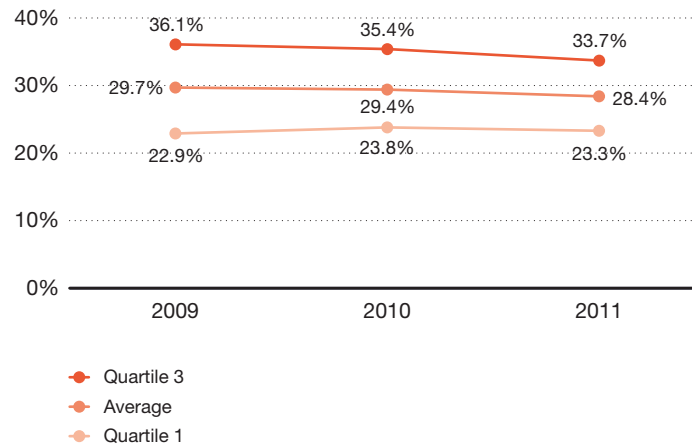
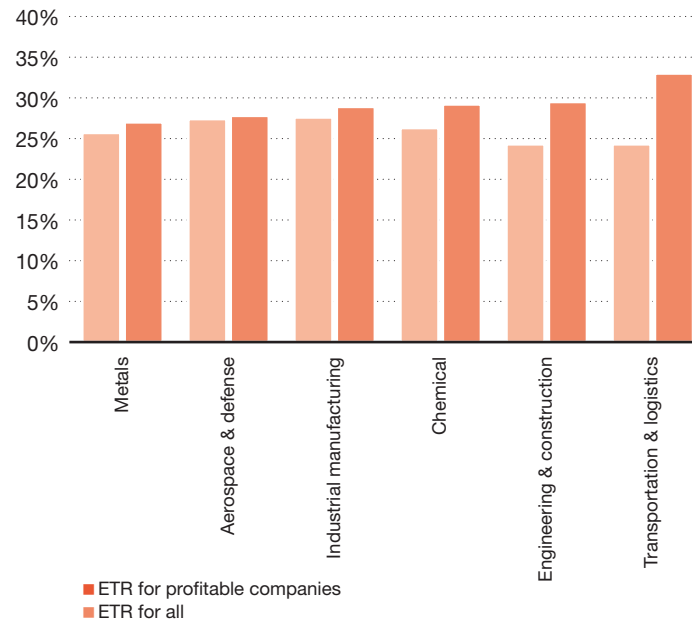


Figure 5—ETR by sector



ETR by territory

Figure 4 shows a falling trend in the average and Quartile 3 ETR, which is perhaps a reflection of the trend in statutory corporate income tax rates around the world. Figure 6 shows the statutory corporate income tax rates for those countries in the study for which we were able to calculate an average ETR.

The average statutory rate for countries in this chart in 2011 is 29.36%, down from an average of 29.94% in 2009 (Source: OECD database). The chart shows a wide variation in statutory rates, with the Swiss rate almost half the rate in Japan and the United States. The United States, India and Korea have “worldwide” tax systems, that is, systems where corporations pay taxes on their profits regardless

of where in the world they earn them. Other countries in the chart have a “territorial” tax system, where tax is paid on the income earned in that country, and foreign-source dividends are totally or largely exempt from tax when remitted.

We reviewed the average effective rate in each country. The results, ranked by a three-year average, are shown in *Figure 7*. The numbers next to the country name indicate the number of companies on which the averages are based. The ETR is highest in Japan at 35.3% and lowest in South Korea at 11.8%.

The biggest variation between statutory and effective rates is found in Canada, where the effective rate ranks four places below the statutory rate. Switzerland and the Netherlands both have effective rate rankings above their statutory rate rankings.

Drivers of the ETR

A number of factors determine the ETR. These can be both structural and recurring, resulting from overseas operations and tax incentives, or items such as losses and tax reserve adjustments that may not necessarily recur.

We analyzed and summarized common drivers and their impact on ETRs. The reconciling items, as disclosed in the statutory/effective rate reconciliation, were analyzed, collated, and averaged for the companies in the study.

Figure 6 – Statutory rates of corporate income tax

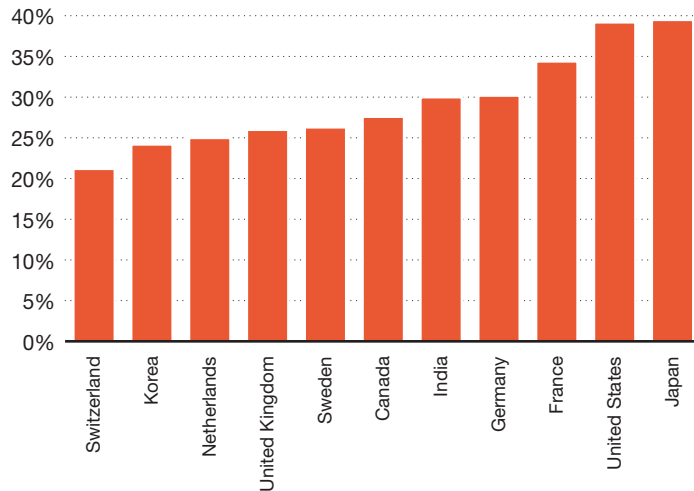


Figure 7 – Effective tax rates by head office territory

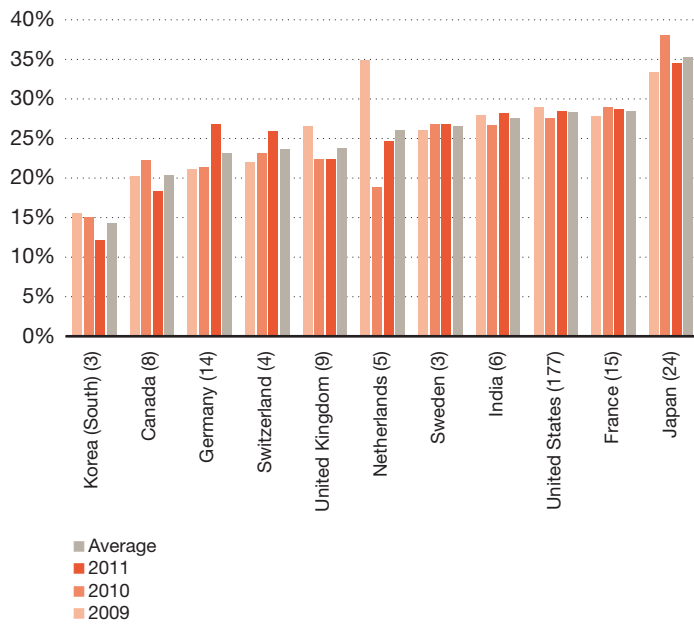


Figure 8—Drivers of the ETR

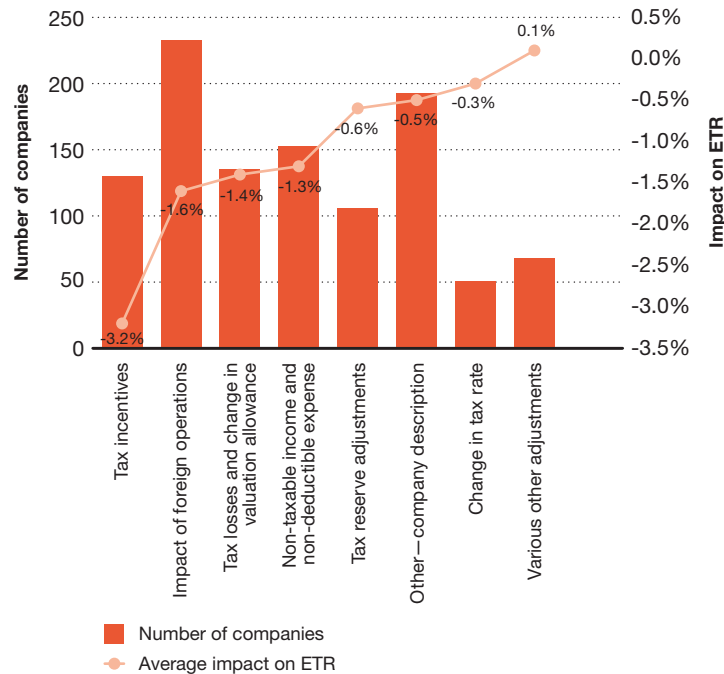


Figure 8 shows how frequently the drivers appear in statutory/effective rate reconciliations and the impact they have on the ETR. The bars show the number of companies reporting the driver and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

Tax incentives

In our review of company accounts, we noted a focus on innovation and research. Now that the recovery is underway, companies are investing in research as a way of differentiating and driving their business. It is not surprising then that tax incentives are a significant favorable driver in the study. Seventy percent of companies in the aerospace and defense sector disclosed a benefit from tax incentives, reflecting development of new aircraft, military equipment, and parts. Forty-nine percent of the chemicals sector companies and 42% of the industrial manufacturing sector also benefited from tax incentives. The incentives were described as production-related deductions, research and development credits, and general business credits.

Impact of foreign operations

This item is the most common driver of the ETR. It is usually a structural, recurring driver that benefited companies by, on average, 1.6% in the study. This favorable driver is an average over companies headquartered in both high tax and low tax locations. As emerging markets develop and companies expand into these territories, we expect to see even more companies reporting this item.

Tax losses and change in valuation allowance

Tax losses and change in valuation allowance can represent both a favorable and unfavorable driver. It

is a favorable driver where recovery in a sector is strong and companies are able to use previously unrecognized losses. In other sectors, such as engineering and construction, some companies are still incurring losses and the change in valuation allowance is unfavorable as losses cannot be recognized. Overall, this is a favorable driver of -1.4%.

Non-taxable income and non-deductible expenses

Companies in the study gained an overall benefit of -1.3% from the net of non-taxable income and non-deductible expenditure. Limited description was given for these items in company accounts.

Tax reserve adjustments

This category reflects the impact of tax settlements and the movement of tax reserves. This is a small favorable driver of -0.6%. Around 30% of the companies in each sector reported this item.

“Other” in company descriptions

This category is for the line described as “other” in company reconciliation. No further detail was available.

Tax disclosures

For the US companies in the study, we reviewed companies’ disclosures on unrecognized tax benefits and unrepatriated earnings to provide us with insights into trends.

Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process

involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

The average unrecognized tax benefit for those US companies reporting this item in the study was \$588M, an increase of 10.2% between 2010 and 2011.

Unrepatriated earnings

US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign subsidiaries, when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equals 189% (median 116%) of the total income before income tax for the companies reporting this item.

Benchmarking by sector:

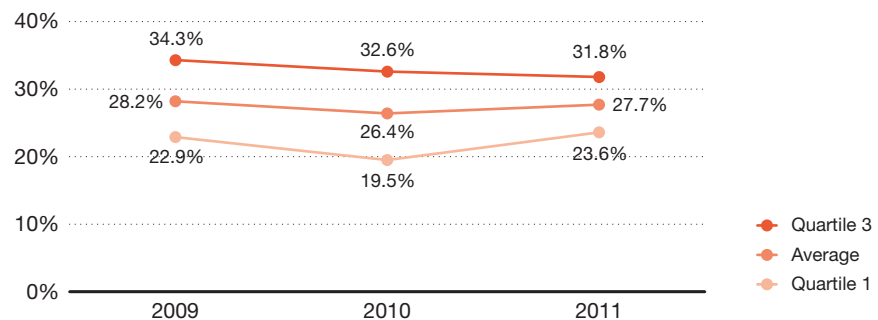
Tax rate benchmarking overview for key sectors

① Tax rate benchmarking for the aerospace and defense sector

In 2011, many companies in the aerospace and defense (A&D) sector faced challenging conditions. The debt crisis in Europe, political tensions in the Middle East, and government austerity programs hampered recovery from the recession. For the defense sector, governments in both Europe and the United States put budgetary pressure on defense spending as they focused on reducing national deficits, although dealing with global threats remained a priority.

Companies established strategic partnerships and expanded into new markets. For the aerospace sector, there was growing demand for aircraft in new markets such as Russia and China, together with the need to replace old commercial fleets in more traditional markets. Air traffic growth continued to rise as the economic recovery continued, boosting demand for aftermarket products and services. There was a continuing commitment to technological innovation in A&D companies to drive business forward.

Figure 9 – Effective tax rate for all companies



The A&D tax rate benchmarking study for 2012 incorporates company data for 53 companies for accounting periods ending in 2011. Twenty-nine companies in the study had calendar year-ends, five companies had March year-ends, and the remainder had year-ends at various times during the year. Data for 2011 were not available for two companies at the time the study was completed; for 2010 and 2009 all data were available. The companies included in the study are listed at the end of this section.

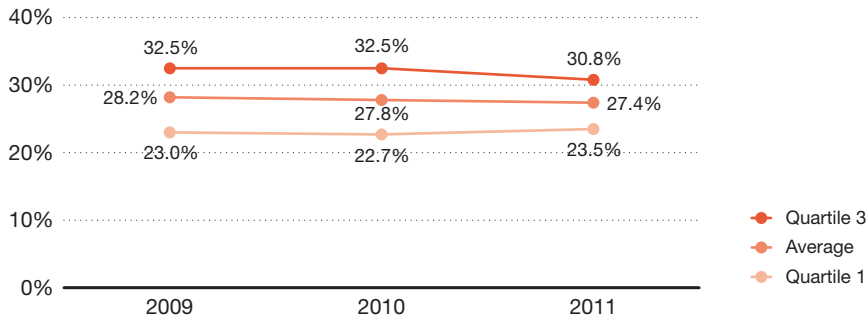
ETR for all companies

The average three-year ETR (effective tax rate) of the A&D sector was 27.4%. There has been a steady decrease in Quartile 3, from 34.3% in 2009 to 31.8% in 2011. The average and Quartile 1 ETRs

decreased between 2009 and 2010 and increased again in 2011. The range between the quartiles fell in 2011 to 8.2 percentage points from 13.1 percentage points in 2010. As the recovery continued, and losses and tax benefits became less common in the sector, the ETR became less volatile, and the range between the quartiles decreased.

For companies in the study, profits increased on average by 20.1%. Three companies had losses in 2011 and two companies had a tax benefit; in 2009, four companies had losses and seven had a tax benefit. A number of individual companies saw fluctuations in the ETR; the ETR fell by more than 10 percentage points in seven companies and increased by more than 10 percentage points in 10 companies. (See Figure 9)

Figure 10— Effective tax rate for profitable companies only



ETR for profitable companies

Figure 10 shows the ETR trend when all companies that have been in a loss or tax benefit position in any of the last three years are removed. After this calculation, 40 companies remained in the analysis.

The average ETR fell slightly over the last three years, just -0.8 percentage points. Quartile 3 has seen a fall in ETR since 2010 and Quartile 1 has seen an increase, with the result that the range between the quartiles for profitable companies has fallen to 7.3%. There was little volatility in individual ratios driving these trends. The ETR fell by more than 10 percentage points for two companies and increased by more than 10 percentage points for two companies.

Drivers of the ETR

Forty-eight companies in the study disclosed reconciliation between their statutory and effective rate in company accounts. It was possible to gain some insight into the drivers of the effective rate in the A&D sector by reviewing this analysis.

The effective rate for 40 companies was below the statutory rate applicable to each company and above the statutory rate for eight companies. The reconciling items as disclosed in

the statutory/effective rate reconciliation were analyzed, collated, and averaged for the sample.

Figure 11 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the impact they had on the ETR. The bars show the number of companies reporting the driver and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

For the A&D sector, the impact of foreign operations was smaller than for other sectors in this study. A number of A&D companies are suppliers to local markets (e.g., governments) and so the benefit they gained from tax differentials on foreign earnings was limited. Instead, the effect of state and local taxes, which are included in this category, gave an overall unfavorable effect of 0.4% (certain defense companies do not reflect the impact of state taxes in the ETR since these are reimbursable).

Figure 11— Drivers of the effective tax rate

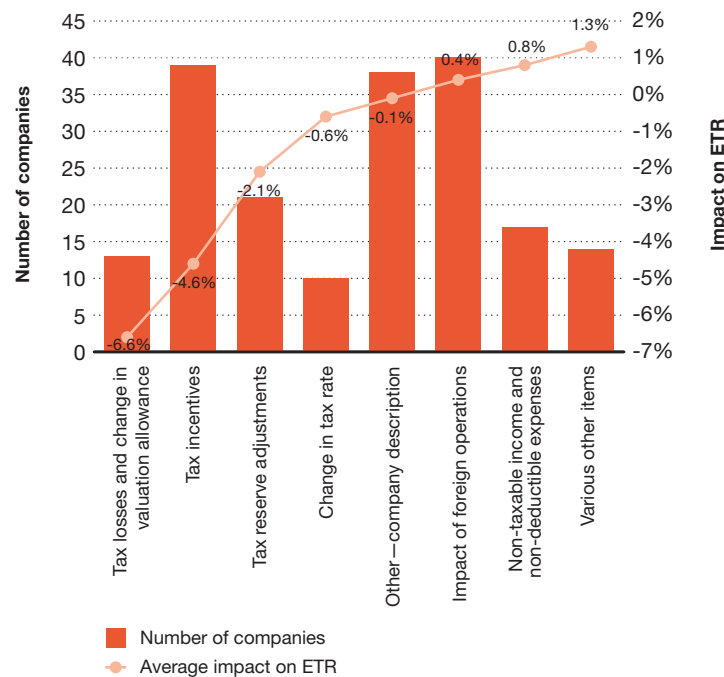
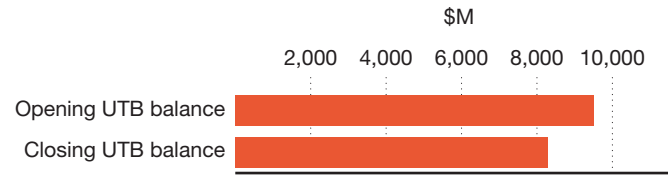


Figure 12—Opening and closing UTB balances



The most favorable drivers were the tax losses and changes in valuation allowances (-6.6%). The most common description was “release of previously unrecognized deferred tax assets” and was a result of improving economic conditions as losses incurred in previous years were used against current profits.

Tax incentives were reported by the largest number of the companies in the sector, with 39 companies gaining an average benefit of 4.6%.

Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process involves recognizing any tax positions

that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 12 shows that total unrecognized tax benefit (UTB) balances in the 32 US-based study companies decreased by 12.7% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$8.3B, and on an individual company basis, the average UTB was \$258M. Giving equal weight to each company, there was an average decrease in UTB from 2010 to 2011 of 12.8% (median-decrease of 7.1%).

We reviewed how frequently the drivers of UTBs were disclosed by companies. The largest movement was in the “reductions for tax positions of prior year,” which drove the overall decrease.

(See *Figure 13*)

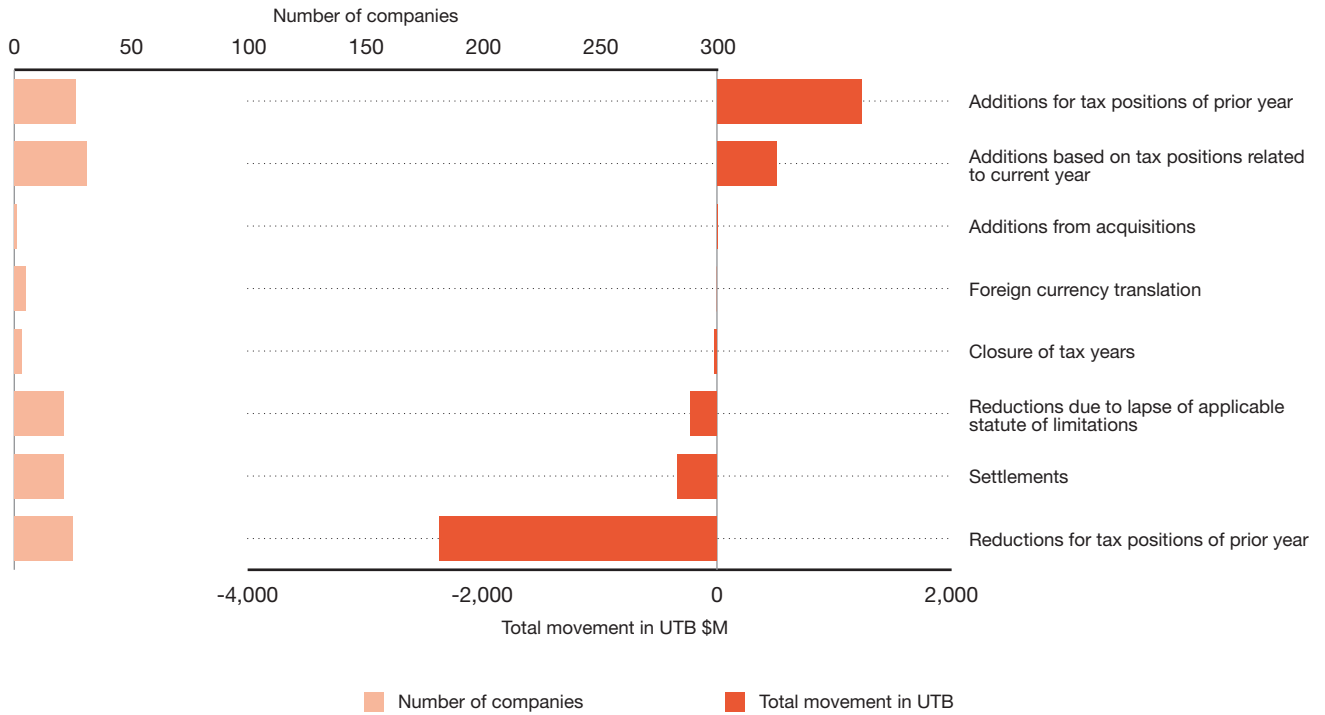
Unrepatriated earnings

US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign subsidiaries, when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

Eighteen US-based multinationals in the study disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equaled 123% (median 50%) of the total income before income tax. One outlier company with low earnings was excluded from the data.

Figure 13—Disclosures of the drivers of UTBs



Companies included in the A&D sector

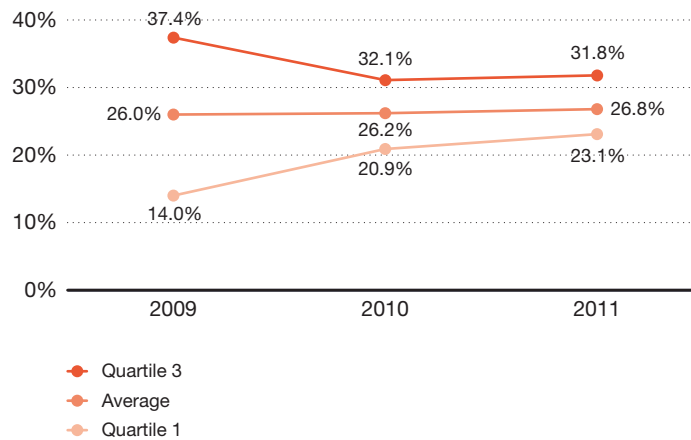
AAR Corp.
Aerosonic Corp.
AeroVironment Inc.
Alliant Techsystems Inc.
Babcock Southern Holdings Ltd.
BAE Systems plc
Barnes Group Inc.
BBA Aviation plc
BE Aerospace Inc.
Boeing Co.
Bombardier Inc.
Breeze-Eastern Corp.
Cobham plc
Curtiss-Wright Corp.
Dassault Aviation S.A.
Ducommun Inc.
EDAC Technologies Corp.
Elbit Systems Ltd.
Embraer
Esterline Technologies Corp.
Exelis
Finmeccanica
FLIR Systems Inc.
GenCorp Inc.
General Dynamics Corp.
General Electric Corp.
Harris Corp.
HEICO Corp.
Hexcel Corp.
L-3 Communications
LMI Aerospace Inc.
Lockheed Martin Corp.
Meggitt plc
Moog Inc.
Northrop Grumman Corp.
Orbital Sciences Corp.
Precision Castparts Corp.
QinetiQ Group plc
Raytheon Co.
Rockwell Collins Inc.
Rolls-Royce Group plc
SAFRAN
SAIC
Smith & Wesson Holding Corp.
Spirit AeroSystems Holdings Inc.
TASER International Inc.
Teledyne Technologies Inc.
Textron Inc.
Thales S.A.
Triumph Group Inc.
United Technologies Corp.
Woodward Governor Co.
Zodiac Aerospace S.A.

☉ Tax rate benchmarking for the chemicals sector

During the 2011 calendar year, many chemical companies continued their recovery from the economic downturn of 2008–2009, in which vast portions of operations and capacity were shuttered as a result of the drastic impact of the financial crisis. Although the current recovery has been hampered by the European debt crisis, destruction caused by the earthquake in Japan, persistent inflation, and the rising cost of raw materials, the industry has been resilient. Many chemicals companies achieved higher sales and earnings growth as a result of investment in high-growth emerging markets, joint venture acquisitions and deals, and global expansion to meet higher demand.

The year also witnessed a significant milestone as the world's population reached seven billion. With finite natural resources and a rapidly growing population, it is a challenge to manage the rising demand. Recognizing this, many companies are focusing on innovation to help meet demographic needs.

Figure 14—Effective tax rate for all companies



The chemicals sector tax rate benchmarking study for 2012 incorporates company data for 47 companies for accounting periods ending in 2011. Thirty-six companies in the study had calendar year-ends, six companies had March year-ends, and the remainder had year-ends at other times during the year. Data for 2011 were not available for one company at the time the study was completed; for 2010 and 2009 all data were available. The companies included in the study are listed at the end of this section.

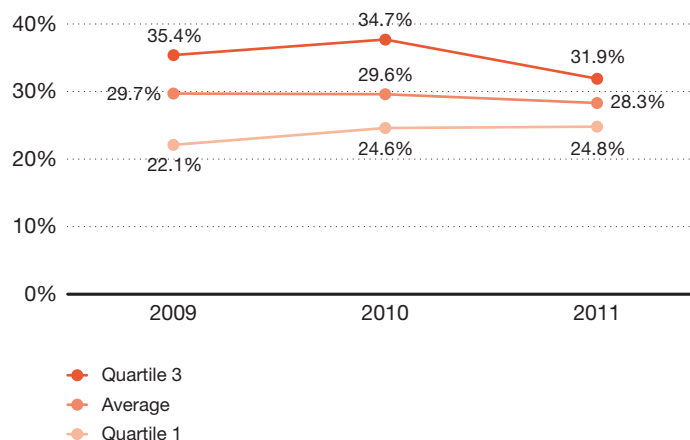
ETR for all companies

The average three-year ETR (effective tax rate) of the chemicals sector was 26.3%; this rate has been relatively constant between 2009 and 2011. There has been a marked decrease in the range between the quartiles, from 23.4 percentage points in 2009 to 11.2 in 2010 and 8.7 in 2011

(i.e., 31.8%–23.1%). This decrease in the quartile range was a result of a general recovery in the sector. As losses were used and profitability returned, ETRs became less distorted and the inter-quartile range narrowed. The maximum ETR in 2011 was 50.9% and the minimum was -1,766%. Eight companies in the study saw a reduction in ETR of more than 10 percentage points compared with 2010, and seven companies saw an increase of more than 10 percentage points. The impact of creation and release of valuation allowances on the use of tax attributes can skew the results, as indicated above.

For companies in the study, profits increased on average by 28.7%, and all companies were profitable in 2011. One company recorded a tax benefit in 2011, compared with four with similar results in 2010 and 11 in 2009. (See Figure 14)

Figure 15—Effective tax rate for profitable companies only



ETR for profitable companies

Figure 15 shows the ETR trend when all companies that have incurred losses or been in a tax benefit position in any of the last three years are removed. After this calculation, 28 companies remained in the analysis.

The average three-year rate for profitable companies was 29.2%, 2.9% higher than the average for all companies in the chemicals sector. Again, there was a marked decrease in the range between the quartiles, from 13.3 in 2009 to 7.1 percentage points in 2011, driven largely by a reduction in Quartile 3. Five companies had a reduction in the ETR of greater than 10 percentage points, and one had an increase in the ETR of greater than 10 percentage points. The maximum ETR was 49.0% and the minimum was 14.4%.

Drivers of the ETR

Forty-four companies in the study disclosed reconciliation between their statutory and effective rate in company accounts. It was possible to gain some insight into the drivers of the effective rate in the chemicals sector by reviewing this analysis, which provides details on the impact of various factors that change the company's tax results from those anticipated using the statutory tax rate.

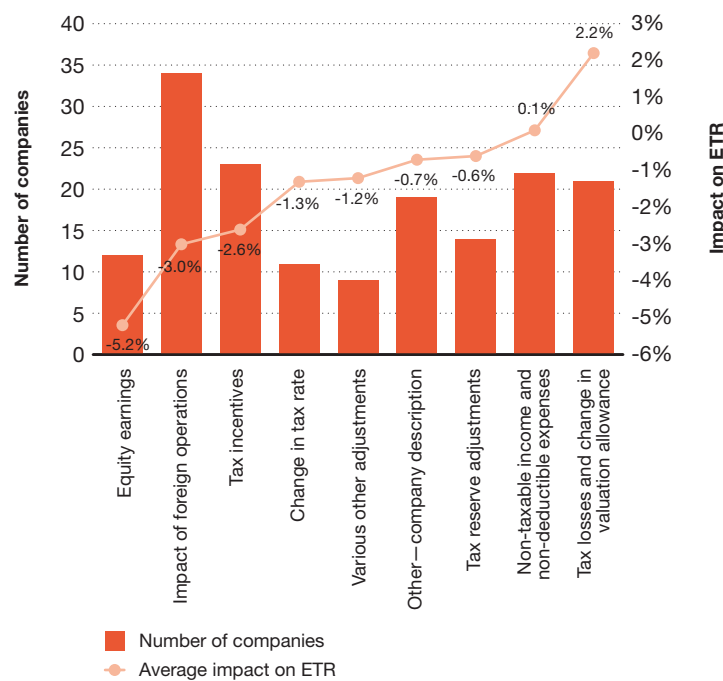
The ETR was below the statutory rate for 32 companies and above the statutory rate for 12 companies. The

reconciling items as disclosed in the statutory/effective rate reconciliation were analyzed, collated, and averaged over the sample.

Figure 16 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the

impact they had on the ETR. The bars show the number of companies that reported the driver, and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

Figure 16—Drivers of the effective tax rate



The most common reconciling item, reported by 34 companies, was the impact of foreign operations, which reduced the ETR by 3.0%. Although this impact was less significant than in the industrial manufacturing sector, where the tax differential on foreign earnings was 5.7%, this was the most favorable driver for the sector, apart from “equity earnings,” and reflected increasing globalization. Equity earnings was reported by 12 companies, which reflected increased “joint venture and associate” activity this year. Under IFRS, a company presents its share of the associate’s post-tax profits and losses in the income statement, but there is no associated tax charge, so this is a favorable reconciling item in the statutory/effective rate reconciliation. For the companies reporting this item, the average impact on the ETR was -5.2%.

Tax incentives were a favorable driver for 23 of the companies in the study, and these companies benefited on average by 2.6%. Twelve companies reported “domestic manufacturing deduction” and nine reported “research and development credit.”

“Various other adjustments” is a category for uncommon reconciling items to avoid excessive detail and “other—company description” reflects the line described as “other” in the company reconciliation. No further detail was available.

Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process

involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 17 shows that total unrecognized tax benefit (UTB) balances in the 28 US-based study companies increased by 12.9% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$8.4B. On an individual company basis, the average UTB was \$299M, the average increase was 5.0%, the maximum increase was 57%, and the maximum decrease was -53%.

Figure 17 – Opening and closing UTB balances

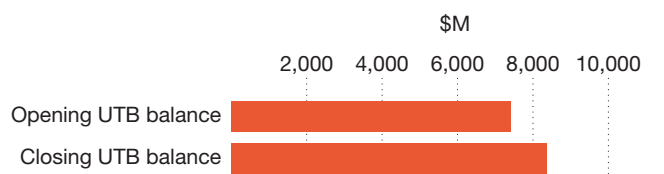
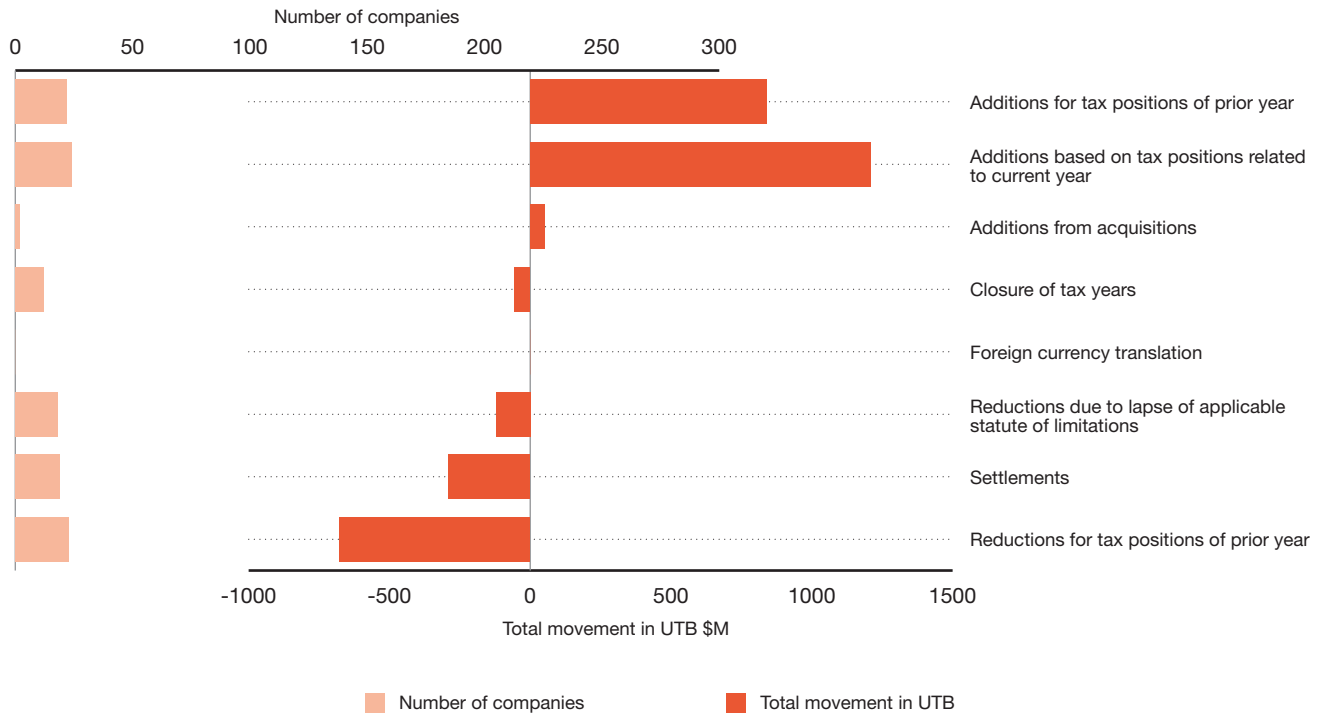


Figure 18—Disclosures of the drivers of UTBs



We reviewed how frequently the drivers of the UTBs were disclosed by companies. Many companies reported additions based on tax positions related to the current year as well as additions and reductions for tax positions of prior years. *Figure 18* shows that the overall increase in UTBs was a result of the additions for tax positions of current and prior years.

Unrepatriated earnings

US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign earnings, when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

Twenty-one US-based multinationals in the study disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes. Four companies stated that, for various reasons, their overseas earnings could not be considered permanently reinvested and provision had been made for their repatriation.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equaled 179.5% (median 176.1%) of the total income before income tax.

Companies included in the chemicals sector

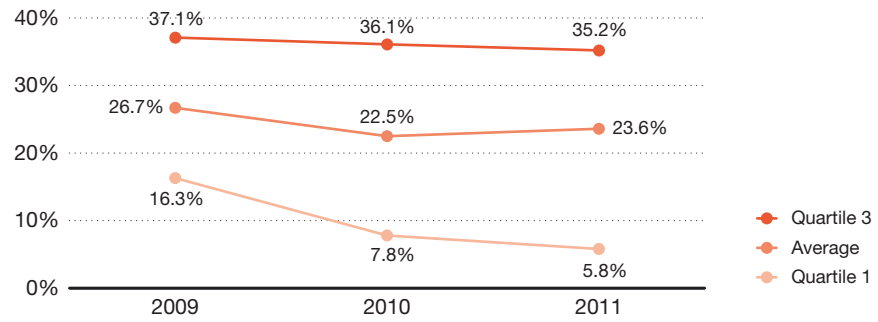
Air Products and Chemicals Inc.
Akzo Nobel N.V.
Albemarle Corp.
Arkema S.A.
Ashland Inc.
BASF SE
Bayer AG
Celanese Corp.
CF Industries Holdings Inc.
Chemtura Corp.
China Petroleum & Chemical Corp.
(The) Clorox Co.
Cytex Industries Inc.
DIC Corp.
(The) Dow Chemical Co.
E. I. Du Pont De Nemours & Co.
Eastman Chemical Co.
Ecolab Inc.
Exxon Mobil Corp.
Ferro Corp.
FMC Corp.
Huntsman Corp.
Innophos Holdings Inc.
International Flavors & Fragrances Inc.
Kuraray Co. Ltd.
L'Air Liquide S.A.
Lanxess AG
Linde AG
Lyondellbasell Industries N.V.
Methanex Corp.
Mitsubishi Chemical Holdings Corp.
Mitsui Chemicals Inc.
Momentive (formerly Hexion)
Monsanto Co.
N L Industries Inc.
Newmarket Corp.
Potash Corporation of Saskatchewan Inc.
PPG Industries Inc.
Praxair Inc.
Reliance Industries Ltd.
Rockwood Holdings Inc.
Royal DSM N.V.
Sigma-Aldrich Corp.
Sinopec Shanghai Petrochemical Co. Ltd.
Sumitomo Chemical Co. Ltd.
Syngenta Ltd.
Westlake Chemical Corp.

⑤ Tax rate benchmarking in the engineering and construction sector

For the engineering and construction (E&C) industry, 2011 remained a challenging year as the anticipated economic recovery did not materialize. Volatility in the price of raw materials and decreasing demand for housing in the United States contributed to high levels of debt. However, while markets, especially in Europe and America, remained relatively weak, there were signs of stabilization. Rapid growth in Asia-Pacific and Latin America demonstrated the shift in demand to emerging markets and contributed to the improved performance of many companies.

The E&C tax rate benchmarking study for 2012 incorporates company data for 59 companies for accounting periods ending in 2011. Forty companies in the study had calendar year-ends, seven companies had September year-ends, and the remainder had year-ends at other times during the year. Data for 2011 were not available for one company at the time the study was completed; for 2010 and 2009 all data were available. The companies included in the study are listed at the end of this section.

Figure 19—Effective tax rate for all companies



ETR for all companies

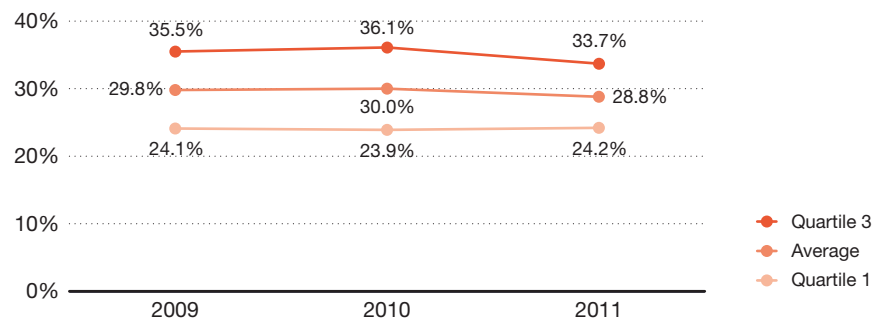
The average three-year ETR (effective tax rate) of the E&C sector was 24.3%. The ETR has been volatile over the last three years, dropping in 2010 to 22.5%, and increasing again in 2011 to 23.6%. The range between the quartiles has increased steadily over the last three years. The range was 20.8 percentage points in 2009, 28.3 in 2010, and 29.4 in 2011. This volatility is an indication of continuing difficulties in the sector. Twenty-two companies had losses in 2009, 22 in 2010, and 18 in 2011. Thirteen companies had a tax benefit in 2011. Many individual companies saw fluctuations in the ETR; the ETR fell by more than 10% in 10 companies and increased by more than 10% in 13 companies. (See Figure 19)

ETR for profitable companies

Figure 20 shows the ETR trend when all companies that have had losses or been in a tax benefit position in any of the last three years are removed. After this calculation, 27 companies remained in the analysis.

The Quartile 1 trend line had a consistent pattern over the three years, with a total movement of just 0.1%. The average and Quartile 3 ETR has fallen since 2010, with the result that the range between the quartiles for profitable companies declined to 9.5%. There was little volatility in individual ratios driving these trends. The ETR fell by more than 10% for two companies and increased by more than 10% for one company.

Figure 20—Effective tax rate for profitable companies



Drivers of the ETR

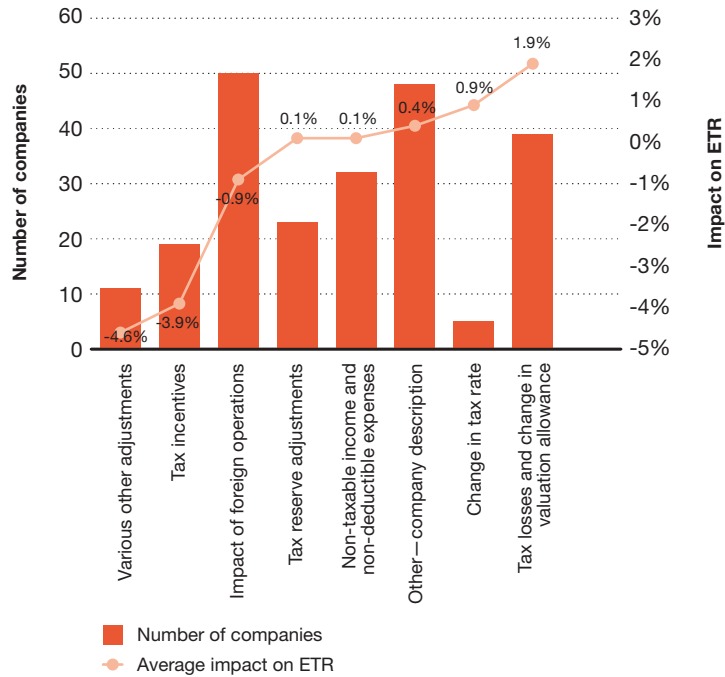
Fifty-five companies in the study disclosed reconciliation between their statutory and effective rates in company accounts. It was possible to gain some insight into the drivers of the effective rate in the E&C sector by reviewing this analysis.

The effective rate for 31 companies was below the statutory rate, and for 24 companies it was above the statutory rate. The reconciling items as disclosed in the statutory/effective rate reconciliation were analyzed, collated, and averaged over the sample.

Figure 21 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the impact they had on the ETR. The bars show the number of companies reporting the driver, and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

For the E&C sector, tax incentives were a large favorable driver, and companies reported tax benefits, domestic manufacturing deductions, and research and development credits in this category. The volatility in this sector was highlighted by the impact of “various other adjustments.”

Figure 21 – Drivers of the effective tax rate



Included in this category were depletion allowances, equity earnings effect, adjustments for planned dividend distributions, and other uncommon and one-off items.

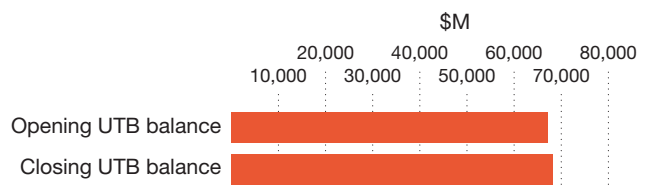
Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process

involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 22 shows that total unrecognized tax benefit (UTB) balances in the 46 US-based companies in the study increased by 1.5% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$68.3B, and on an individual company basis, the average UTB was \$1.4B. While the total UTB

Figure 22 – Opening and closing UTB balances



increased overall, on an average basis, giving equal weight to each company, there was a decrease in UTBs from 2010 to 2011 of 3.4% (median decrease of 11.3%).

We reviewed how frequently the drivers of the UTBs were disclosed by companies. The largest movements were in additions for the current year and reductions for prior years. To a large extent, these totals offset each other. (See Figure 23)

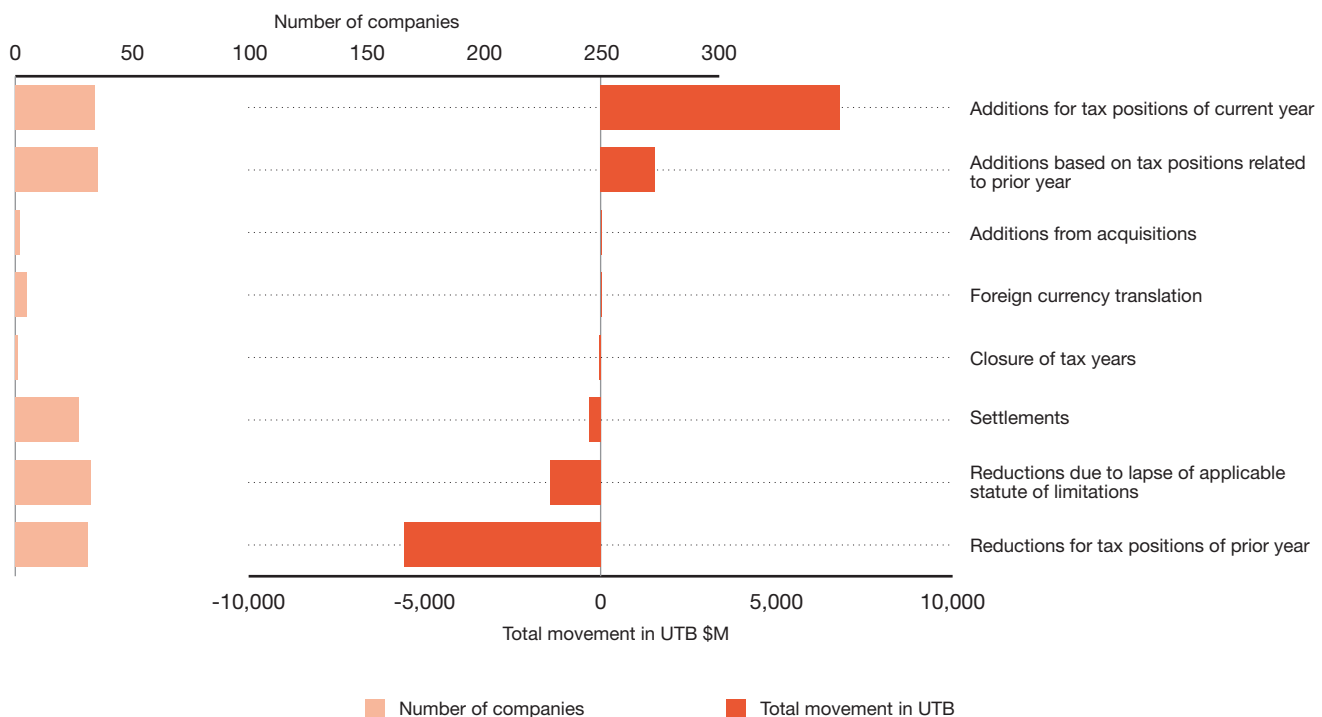
Unrepatriated earnings

US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign subsidiaries, when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

Twenty US-based multinationals in the study disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equaled 221% (median 56%) of the total income before income tax.

Figure 23 – Disclosures of the drivers of UTBs



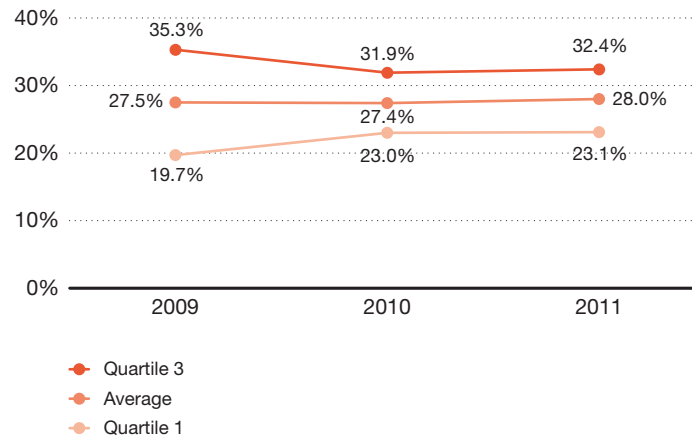
Companies included in the E&C sector

Abertis Infraestructuras S.A.	KB Home
ACS Actividades De Construccion Y Servicios S.A.	KBR Inc.
AECOM Technology Corp.	Kone Corp
Aegion	Lafarge S.A.
Armstrong World Industries Inc.	Lennar Corp.
Beacon Roofing Supply Inc.	Lennox International Inc.
Beazer Homes USA Inc.	Manitowoc Company Inc.
Bouygues S.A.	Martin Marietta
Builders FirstSource Inc.	Meritage Homes Corp.
Carlisle Companies Inc.	Mitsubishi Heavy Industries
Cascade Corp.	NACCO Industries Inc.
Caterpillar Inc.	NCI Building Systems Inc.
Cemex SAB de CV	NVR Inc.
CH2M Hill	Owens Corning
CRH Plc	PulteGroup Inc.
Crown Castle Intl.	Quanta Services Inc.
D.R. Horton Inc.	Ryland Group Inc.
Dover Corp.	Shaw Group Inc.
EMCOR Group Inc.	Standard Pacific Corp.
Fluor Corp.	Terex Corp.
Foster Wheeler	Tetra Tech Inc.
Granite Construction Inc.	Toll Brothers Inc.
HD Supply	Toshiba/Westinghouse
Holcim Ltd.	Tutor Perini Corp.
Hovnanian Enterprises Inc.	URS Corp.
Integrated Electrical Services Inc.	US Concrete
Jacobs Engineering Group Inc.	USG Corp.
James Hardie Industries SE	VINCI
Joy Global Inc.	Vulcan Materials Co.
	Willbros

④ Tax rate benchmarking in the industrial manufacturing sector

The industrial manufacturing (IM) industry experienced a recovery this year, during a volatile business climate. There is cautious optimism that the recovery will continue, but with an expectation that it will be uneven. Emerging markets (principally, China, India, and Brazil) invested in infrastructure and increasing automation, driving much of the recovery, while the sovereign debt crisis in Europe and unemployment in mature markets created uncertainty in other parts of the world. A number of companies in the study had operations in or were based in Japan, and the earthquake in March 2011 and its aftermath had a significant impact on companies operating in that country.

Figure 24—Effective tax rate for all companies



Many companies reported a focus on innovation and development, seeing new products and processes as a way to differentiate and drive their business forward. New ideas led to the inception of new products and production methods, which improved firms' productivity. A focus on costs, although still present, was less marked than last year.

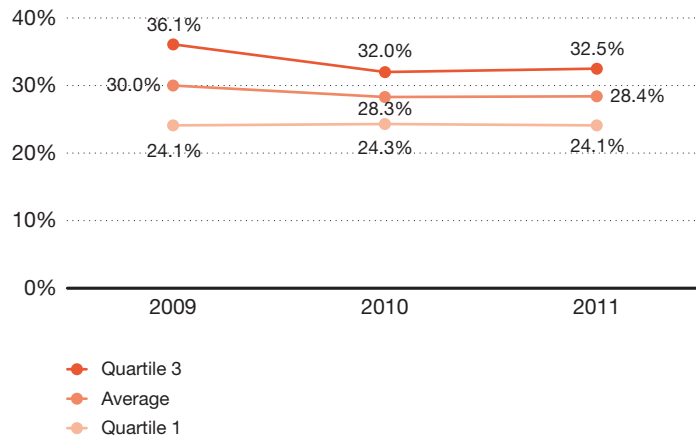
The IM tax rate benchmarking study for 2012 incorporates company data for 55 companies for accounting periods ending in 2011. Thirty-six companies in the study had calendar year-ends, 10 companies had March year-ends, and the remainder had year-ends at other times during the year. Data for 2011 were not available for one company at the time the study was completed; for 2010 and 2009 all data were available. The companies included in the study are listed at the end of this section.

ETR for all companies

The average three-year ETR (effective tax rate) of the IM sector was 27.6%. There has been a small increase in the 2011 ETR (28.0%) compared with 2009 (27.5%), but a decrease in the range between the quartiles, from 15.6 to 9.3 percentage points. As losses were used and profitability returned, ETRs were less distorted and the inter-quartile range narrowed. However, there was volatility in the ETRs that reflected external events, such as the earthquake in Japan; the maximum ETR in 2011 was 74.8% and the minimum was -81.8%. Four companies in the study saw a reduction in the ETR of more than 10 percentage points compared with 2010, and three companies saw an increase of more than 10 percentage points.

For companies in the study, profits increased on average by 24.0%, and all but two companies were profitable in 2011. One company was in a tax benefit position in 2011, compared with nine in a tax benefit position in 2009. (See Figure 24)

Figure 25 – Effective tax rate for profitable companies



ETR for profitable companies

Figure 25 shows the ETR trend when all companies that have had losses or been in a tax benefit position in any of the last three years are removed. After this calculation, 41 companies remained in the analysis.

Both Quartile 1 and average ETR are consistent from 2010 to 2011. The range between the quartiles is 8.4% in 2011. Only one company had a movement in the ETR between 2010 and 2011 of more than 10 percentage points; the lowest ETR was 9.0% and the highest was 74.8%.

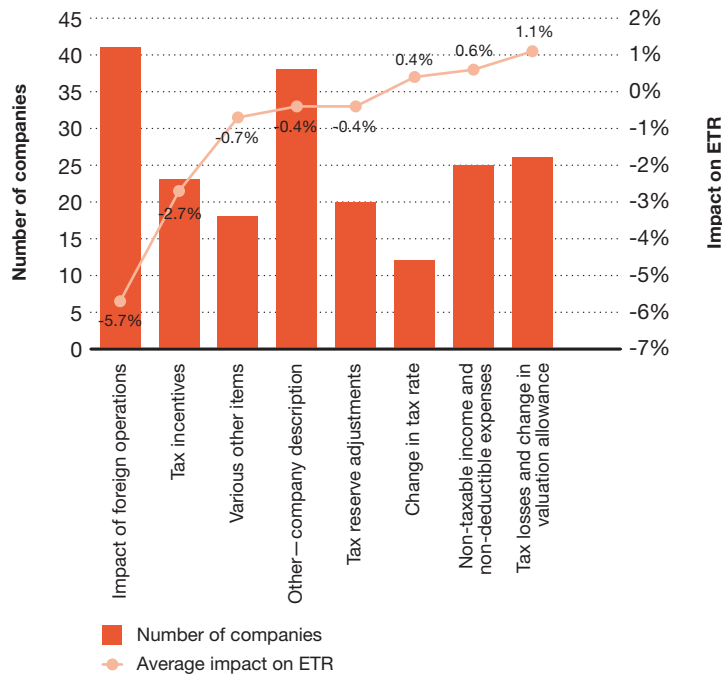
Drivers of the ETR

Forty-four companies in the study disclosed reconciliation between their statutory and effective rate in company accounts. It was possible to gain some insight into the drivers of the effective rate in the IM sector by reviewing this analysis.

The effective rate for 35 companies was below the statutory rate, and for nine companies it was above the statutory rate. The reconciling items as disclosed in the statutory/effective rate reconciliation were analyzed, collated, and averaged over the sample.

Figure 26 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the

Figure 26 – Drivers of the effective tax rate



impact they had on the ETR. The bars show the number of companies reporting the driver, and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

The most common reconciling item, reported by 41 companies, was the impact of foreign operations, which reduced the ETR by 5.7%. This reflects increasing globalization in the sector, as highlighted in the special report, and the increasing significance of emerging markets. State taxes, where levied, fell into this category, and increased the ETR, but the tax differential on foreign earnings was favorable for the majority of companies in the study.

Tax incentives were a favorable driver for 23 of the companies in the study, and these companies benefited on average by 2.7%. Descriptions of the tax incentives varied from specific descriptions of “domestic manufacturing deduction” and “research and development credit” to the broader “general business credit.”

The other item having an impact of greater than 1% was “tax losses and change in valuation allowance.” Twenty-six companies reported this item, and it had an unfavorable impact of 1.1%. Change in valuation allowance, which can be both a positive and negative driver, was the most common description. It was a positive driver in seven instances and negative in nine instances.

Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 27 shows that total unrecognized tax benefit (UTB) balances in the 24 US-based companies in this study decreased by 9.8% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$11.6B. On an individual company basis, the average UTB was \$465M, the average decrease was 2.7%, the maximum increase was 163%, and the maximum decrease was -75%.

Figure 27 – Opening and closing UTB balances

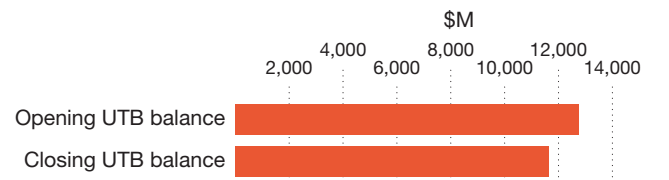
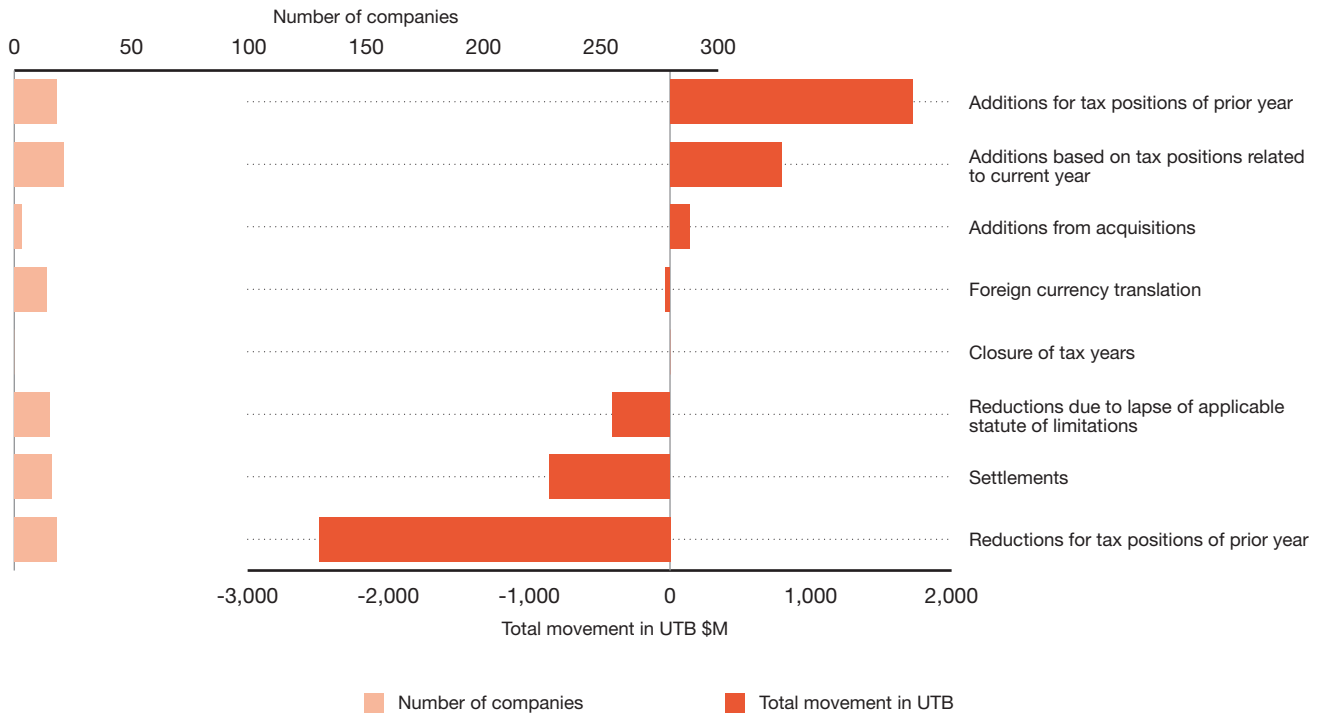


Figure 28—Disclosures of the drivers of UTBs



We reviewed how frequently the drivers of the UTBs were disclosed by companies. The majority of companies (more than 80%) reported additions based on tax positions related to the current year as well as additions and reductions for tax positions of prior years. *Figure 28* illustrates that the overall reduction in UTBs was a result of prior years in which the reductions were larger than the additions in the current year.

Unrepatriated earnings

US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign subsidiaries, when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

All 23 US-based multinationals in the study disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equaled 318% (median 224%) of total income before income tax.

Companies included in the IM sector

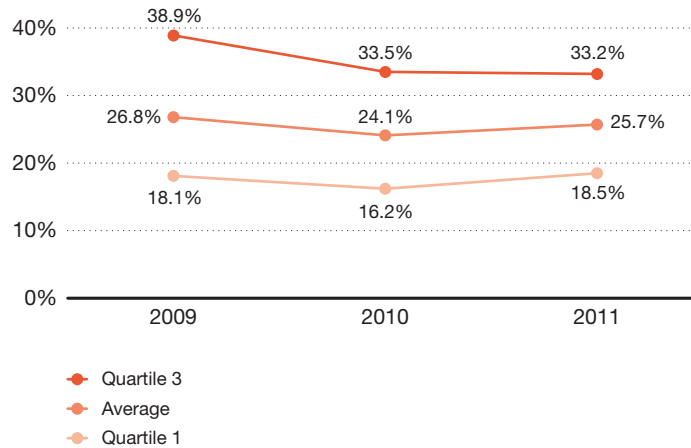
3M Co.
ABB Ltd.
AB Volvo
Alstom S.A.
Alfa Mexico
Amcort Ltd.
Atlas Copco AB
Ball Corp.
Bharat Heavy Electricals Ltd.
Bridgestone Corp.
Canon Inc.
Compagnie De Saint-Gobain S.A.
Michelin S.c.a.
Continental AG
Cooper Industries plc
Corning Inc.
Cymer Inc.
Danaher Corp.
Deere & Co.
Dresser-Rand Inc.
E.ON AG
Eaton Corp.
Emerson Electric Co.
Energizer Holdings Inc.
Fanuc Ltd.
Flowserve Corp.
General Electric Co.
HeidelbergCement AG
Honeywell International Inc.
Hutchison Whampoa Ltd.
Hyundai Heavy Industries Co. Ltd.
Illinois Tool Works Inc.
Ingersoll-Rand plc
Itochu Corp.
ITT Corp.
Jardine Matheson Holdings Ltd.
Jardine Strategic Holdings Ltd.
Komatsu Ltd.
Larsen and Toubro Ltd.
MAN SE
Mitsubishi Corp.
Mitsubishi Electric Corp.
Mitsui & Co. Ltd.
PACCAR Inc.
Parker-Hannifin Corp.
Rockwell Automation Inc.
Sandvik AB
Schneider Electric S.A.
Siemens AG
SPX Corp.
Sumitomo Corp.
Te Connectivity Ltd.
The Timken Co.
Tyco International Ltd.
Xerox Corp.

⑤ Tax rate benchmarking in the metals sector

This was a challenging year for many metals companies, with substantial increases in the price of almost all commodities, mineral resources, and energy. While many companies in the sector saw an upswing in demand for their products from the automotive and commercial vehicles industry, mechanical engineering companies, consumer goods companies, and the aviation industry, a more robust recovery was hampered by a lack of growth in the construction industry.

The metals tax rate benchmarking study for 2012 incorporates company data for 48 companies for accounting periods ending in 2011. Twenty-eight companies in the study had calendar year-ends, eight companies had March year-ends, and the remainder had year-ends at other times during the year. Data for 2011 were not available for five companies at the time the study was completed. The companies included in the study are listed at the end of this section.

Figure 29 – Effective tax rate for all companies



ETR for all companies

The average three-year ETR (effective tax rate) of the metals sector was 25.5%. The ETRs of the average and Quartile 1 are at similar levels in 2011 as they were in 2009, with a small dip in 2010. By contrast, Quartile 3 has shown a steady fall over the three-year period with a drop of more than five percentage points from 2009 to 2011. While 18 companies had losses in 2009, this number dropped to six in 2011. Profits increased on average by 31.5% between 2010 and 2011 (excluding three ratios over 1,000%). (See Figure 29)

ETR for profitable companies

Figure 30 shows the ETR trend when all companies that have had losses or been in a tax credit position in any of the last three years are removed. After this calculation, 24 companies remained in the analysis.

There has been a fall in ETRs between 2009 and 2011 in both the quartiles and the average. This may be due to increasing globalization into emerging markets or use of losses as profits recover. The ETRs ranged from 2.2% to 48.7%.

Figure 30 – Effective tax rate for profitable companies

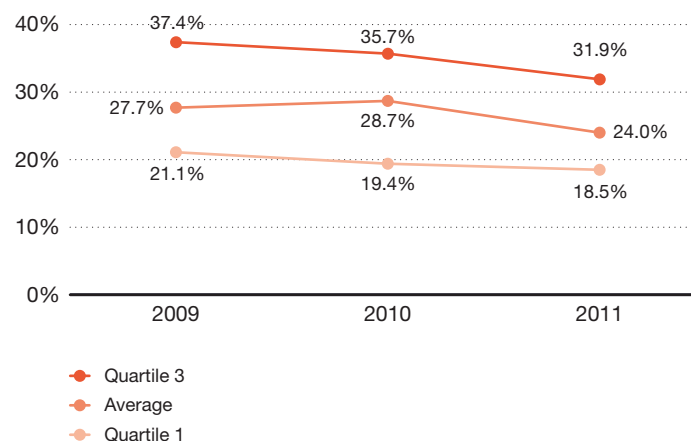
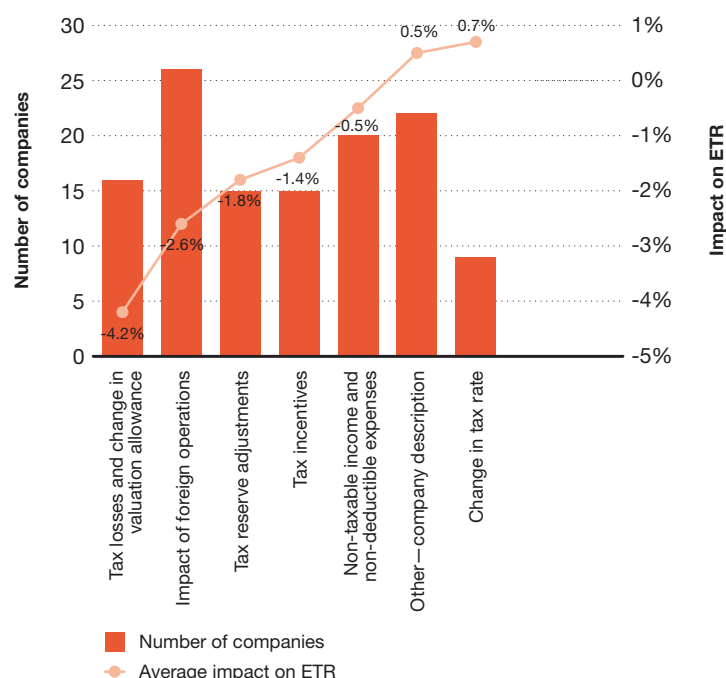


Figure 31 – Drivers of the effective tax rate



Drivers of the ETR

We were able to analyze 28 statutory/effective rate reconciliations for the companies in this study. (A number of companies in this sector had not released full annual reports at the time this study was completed.) It was possible to gain some insight into the drivers of the effective rate in the metals sector by reviewing this analysis.

The effective rate was below the statutory rate for 19 companies and above the statutory rate for nine companies. The reconciling items as disclosed in the statutory/effective rate reconciliation were analyzed, collated, and averaged over the sample.

Figure 31 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the impact they had on the ETR. The bars show the number of companies reporting the driver, and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

The most common reconciling item, reported by 26 companies, was the impact of foreign operations, which reduced the ETR by 2.6%, a reflection of increasing globalization in the sector, as demand for resources in emerging markets increased.

Tax losses and changes in valuation allowance were reported by 16 companies with an average impact of 4.2%. As companies became more profitable, they were able to use tax losses previously not recognized, giving rise to the favorable driver.

Tax reserve adjustments were reported by 15 companies and had a favorable impact of 1.8%. These adjustments were primarily driven by changes to prior-year estimates and tax audits.

Unrecognized tax benefit

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 32—Opening and closing UTB balances

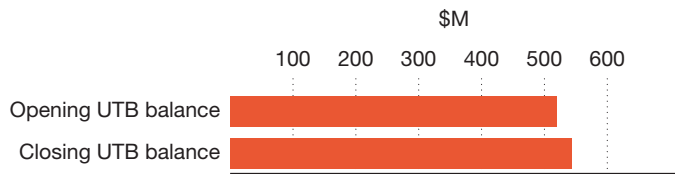


Figure 32 shows that total unrecognized tax benefit (UTB) balances in the 14 US-based companies in the study disclosing this total increased by 4.4% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$542M. On an individual company basis, the average UTB was \$39M, and there was an average decrease of 5.0% (median 4.3%).

We reviewed how frequently the drivers of the UTBs were disclosed by companies. The majority of companies reported additions based on tax positions related to the current year as well as additions and reductions for

tax positions of prior years. Figure 33 shows that the overall increase in the UTBs is a result of additions relating to current and prior years. Reductions due to lapse of applicable statute of limitations also has an impact in this sector.

Unrepatriated earnings

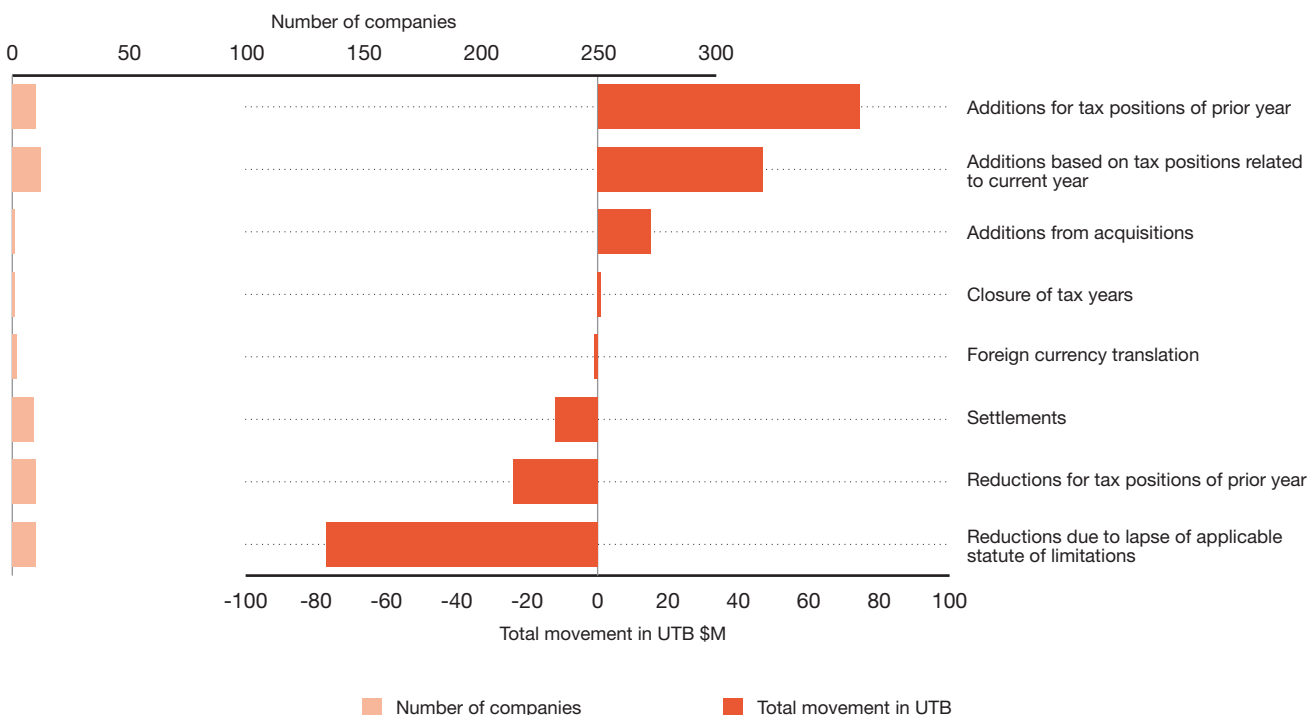
US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on

non-repatriated earnings from foreign subsidiaries when the subsidiary is operating in a jurisdiction with lower tax rates than in the United States.

Eleven companies in the study disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equaled 81% (median 45%) of the total income before income tax. One outlier company was excluded from the data.

Figure 33—Disclosures of the drivers of UTBs



Companies included in the metals sector

AK Steel Holding Corp.
Alba Mineral Resources plc
Alcoa Inc.
Allegheny Technologies Inc.
Aluminum Corporation Of China Ltd.
Angang Steel Company Ltd.
ArcelorMittal
Baoshan Iron & Steel Co. Ltd.
BHP Billiton plc
Bluescope Steel Ltd.
Cameco Corp.
Carpenter Technology Corp.
Century Aluminum Co.
Cliffs Natural Resources Inc.
Commercial Metals Co.
Companhia Siderurgica Nacional
(National Steel Co.)
Eramet SA
Fortescue Metals Group Ltd.
Gerdau S.A.
Hindalco Industries Ltd.
JFE Holdings Inc.
Jindal Steel And Power Ltd.
Kaiser Aluminum Corp.
Kobe Steel Ltd.
Nippon Steel Corp.
Norsk Hydro ASA
Nucor Corp.
Outokumpu Oyj
POSCO
Reliance Steel & Aluminum Co.
Rio Tinto plc
Salzgitter AG
Schnitzer Steel Industries Inc.
Severstal Open Joint-Stock Co.
Shanxi Taigang Stainless Steel Co. Ltd.
Steel Authority Of India Ltd.
Steel Dynamics Inc.
Tata Steel Ltd.
Teck Resources Ltd.
Tenaris S.A.
Thyssenkrupp AG
United States Steel Corp.
Usinas Siderurgicas De Minas
Gerais S.A.
Vale S.A.
Voestalpine AG
Western Mining Co. Ltd.
Worthington Industries Inc.
Wuhan Iron and Steel Co. Ltd.

Ⓞ Tax rate benchmarking in the transportation and logistics sector

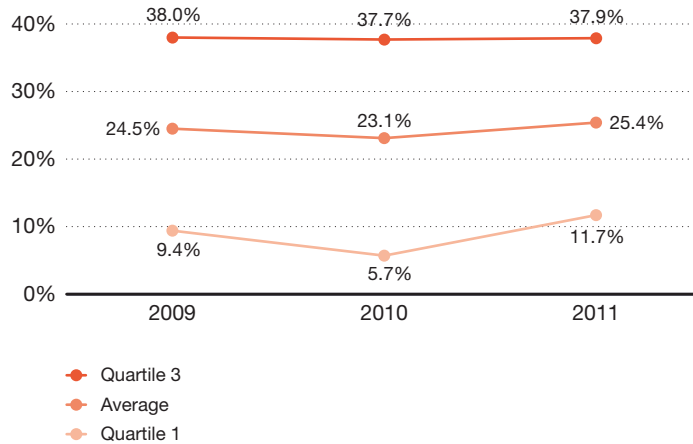
In 2011, the transportation and logistics (T&L) sector was faced with slow global economic growth and high fuel costs; nevertheless, it saw an increase in demand. A number of factors drove the recovery in demand. In emerging markets, the T&L sector expanded rapidly due to the increase in traffic and establishment of new routes. As Internet purchasing continued to grow and replace shop-based retail purchases, it brought growth in demand for the delivery of goods. Governments, too, had a positive impact on the sector, as they sought to secure good transportation links.

The T&L sector tax rate benchmarking study for 2012 consists of 62 companies from road, rail, water, and air transportation for accounting periods ending in 2011. Fifty companies in the study had calendar year-ends, nine companies had March year-ends, and the remainder had year-ends at other times during the year. Data for 2011 were not available for six companies at the time the study was completed; for 2010 and 2009 all data were available. The companies included in the study are listed at the end of this section.

ETR for all companies

The average three-year ETR (effective tax rate) of the T&L sector was 24.3%. The average has remained relatively constant between 2009 and 2011, and

Figure 34—Effective tax rate for all companies



the wide range between the quartiles has also remained constant over the period (28.6 percentage points in 2009, 32.0 in 2010, and 26.2 in 2011).

The maximum ETR in 2011 was 64.3% and the minimum was -58.1%. Thirteen companies in the study saw a reduction in ETR of more than 10 percentage points compared with 2010, and 12 companies saw an increase of more than 10 percentage points.

For companies in the study, profits increased on average by 16.3%. There were seven companies with losses and

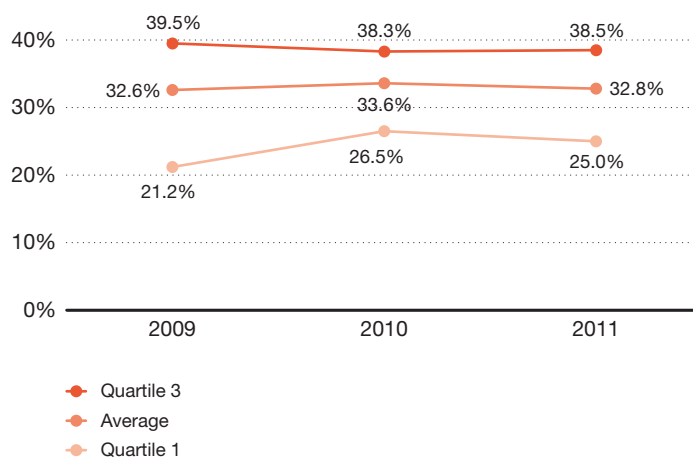
seven companies in a tax benefit position in 2011, compared with 11 in a tax benefit position in 2010 and 15 in 2009. (See Figure 34)

ETR for profitable companies

Figure 35 shows the ETR trend when all companies that have had losses or been in a tax benefit position in any of the last three years are removed. After this calculation, 34 companies remained in the analysis.

The average three-year rate for profitable companies was 33.0%, 8.7% higher than the average for

Figure 35—Effective tax rate for profitable companies



all companies. The average and Quartile 1 have both shown a decrease in ETR compared with 2010, with Quartile 3 remaining broadly level. Five companies had a reduction in ETR of greater than 10 percentage points compared to 2010, and two had an increase in ETR of greater than 10 percentage points. The maximum (64.3%) and minimum (0.8%) ETRs highlighted the broad range of ETRs for this group of companies.

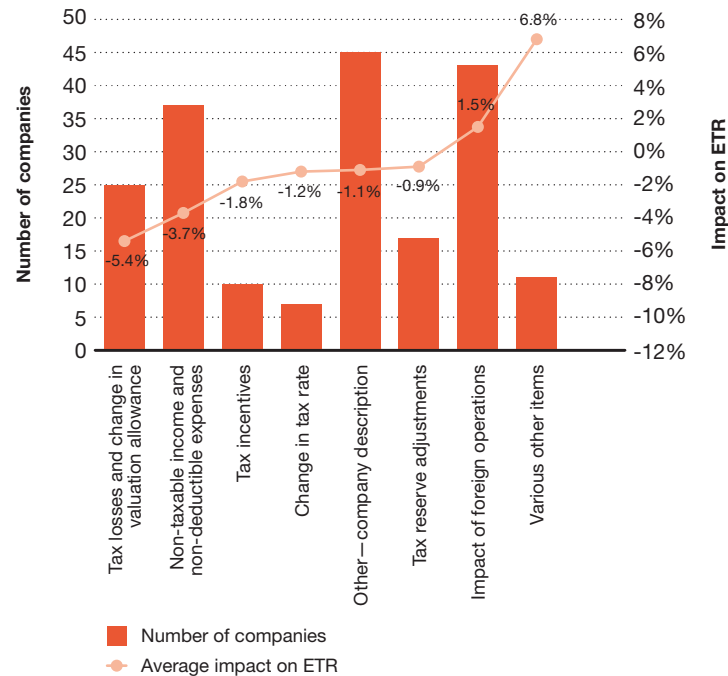
Drivers of the ETR

Fifty T&L companies in the study disclosed reconciliation between their statutory and effective rate in company accounts. It was possible to gain some insight into the drivers of the effective rate in the T&L sector by reviewing this analysis.

The effective rate was below the statutory rate for 26 companies and above the statutory rate for 24 companies. The reconciling items as disclosed in the statutory/effective rate reconciliation were analyzed, collated, and averaged over the sample.

Figure 36 shows how frequently the drivers appeared in statutory/effective rate reconciliations and the impact they had on the ETR. The bars show the number of companies reporting the driver, and the line shows the impact of that reconciling item averaged over all companies reporting it, excluding single outlying ratios in excess of +50% or -50%.

Figure 36—Drivers of the effective tax rate



The most common reconciling item for the T&L sector, reported by 43 companies, was the impact of foreign operations. This increased the average ETR by 1.5%, a different picture from other industrial product sectors, where the impact of foreign operations was a favorable driver. Much of the increase was from the effect of state and local taxes, with more limited benefit in this sector from the tax differential of foreign earnings. Tax losses and changes in valuation allowances were the most favorable driver for this sector, reducing the average ETR by -5.4%. A number of companies reported a significant impact from the recognition of previously unrecognized deferred tax assets, an indication of the continuing growth and recovery in the sector.

Non-taxable income and non-deductible expenses were reported by 37 companies and had a favorable

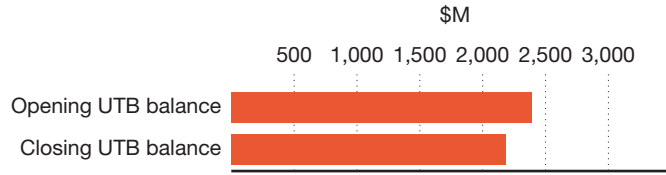
impact of 3.7%. The descriptions in this category were broad, including “tax-exempt income and non-deductible expenses,” and “change in permanent differences.”

Unrecognized tax benefits

The accounting recognition and disclosure requirements in the US for uncertainty in a tax position taken or expected to be taken in a tax return involves a two-step approach of evaluating tax positions and determining if they should be recognized in the financial statements. This process involves recognizing any tax positions that are “more likely than not” to be sustained upon examination. If the tax position meets this threshold, the tax position must be measured using specified criteria.

Figure 37 shows that total unrecognized tax benefit (UTB) balances in the 22 US-based companies in the

Figure 37—Opening and closing UTB balances



study decreased by 8.7% between 2010 and 2011. Total UTBs for all companies at the end of 2011 amounted to \$2.1B. On an individual company basis, the average UTB was \$91M, the average decrease was 3.7%, the maximum increase was 24.4%, and the maximum decrease was -100%.

We reviewed how frequently the drivers of the UTBs were disclosed by companies. Many companies reported additions based on tax positions related to the current year as well as additions and reductions for tax positions of prior years. *Figure 38* shows

that the overall decrease in the UTBs was a result of the reductions relating to prior years and settlements.

Unrepatriated earnings

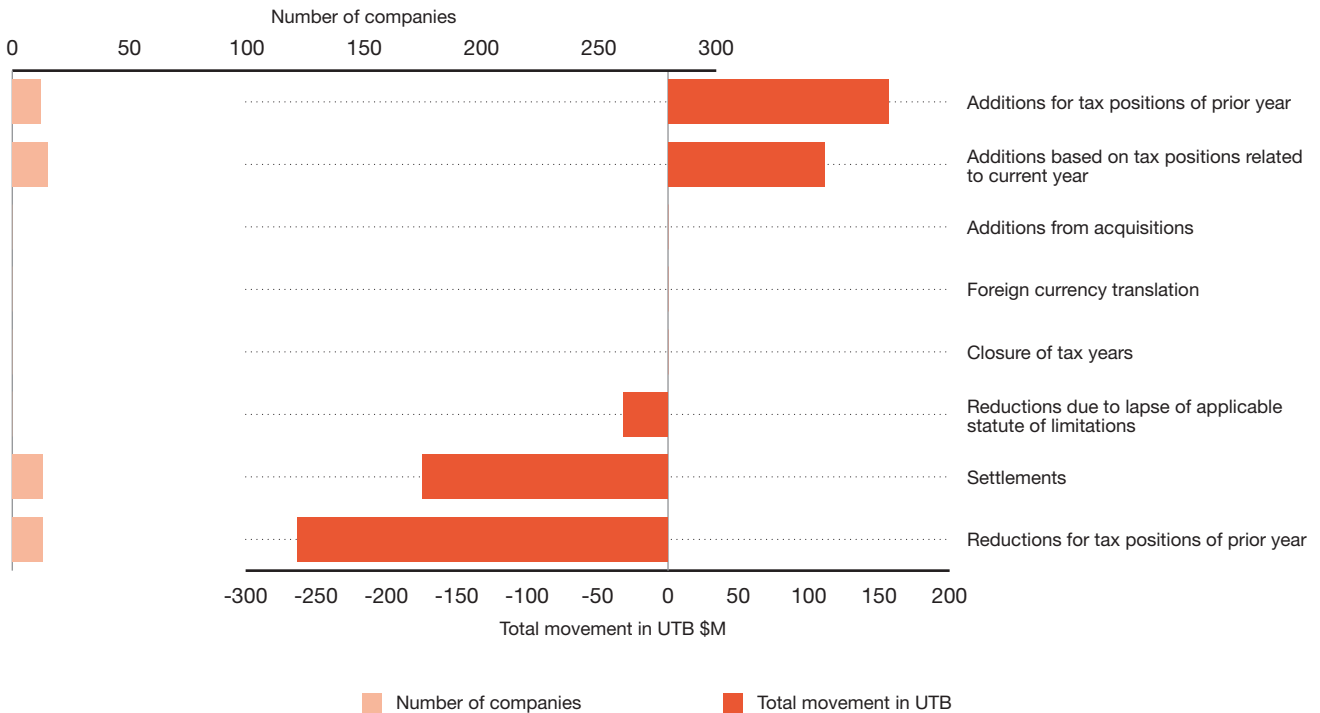
US-based multinationals are permitted to defer incremental taxes, which would be borne in the United States upon repatriation of foreign earnings. Without deferral, US multinationals would incur incremental US tax expense on their books, net of expected foreign tax credits, on non-repatriated earnings from foreign subsidiaries, when the subsidiary is

operating in a jurisdiction with lower tax rates than in the United States.

Of the 28 US-based multinationals in the study, 10 disclosed the total cumulative amount of undistributed earnings from their foreign subsidiaries on which the US-based parent company had not recognized income taxes.

The average total cumulative amount of undistributed earnings from foreign subsidiaries equals 59.6% (median 48.9%) of the total income before income tax.

Figure 38—Disclosures of the drivers of UTBs



Companies included in the T&L sector

A.P. Moeller-Maersk A/S
Aeroports de Paris S.A.
Air Canada
Air China Ltd.
Air France–KLM
Air Methods Corp.
Alaska Air Group Inc.
All Nippon Airways Co. Ltd.
AMR Corp.
Atlas Air Worldwide Holdings Inc.
Berkshire Hathaway Inc.
Brisa–Auto-Estradas de Portugal S.A.
C.H. Robinson Worldwide Inc.
Canadian National Railway Co.
Canadian Pacific Railway Ltd.
Cathay Pacific Airways Ltd.
China COSCO Holdings Company Ltd.
China Merchants Holdings
(Int'l) Co. Ltd.
China Shipping Container Lines
Co. Ltd.
China Shipping Development Co. Ltd.
China Southern Airlines Ltd.
Con-way Inc.
CSX Corp.
Delta Air Lines Inc.
Deutsche Lufthansa AG
Deutsche Post AG
Expeditors International of Washington
FedEx Corp.
Ferrovial SA
Fraport AG
Genesee & Wyoming
Hyundai Merchant Marine Co. Ltd.
J.B. Hunt Transport Services Inc.
JetBlue Airways Corp.
Kansas City Southern
Kuehne & Nagel International AG
Landstar System Inc.
Macquarie Infrastructure
Company LLC
MISC Berhad
Mitsui O.S.K. Lines Ltd
Nippon Express Co. Ltd.
Nippon Yusen Kabushiki Kaisha
Norfolk Southern Corp.
Orient Overseas (International) Ltd.
Overseas Shipholding Group Inc.
Pacer International Inc.
Qantas Airways Ltd.
RailAmerica
Ryanair Holdings plc
Ryder System Inc.
Shanghai International Airport
Co., Ltd.
Shanghai International Port (Group)
Singapore Airlines Ltd.
Southwest Airlines Co.
TNT NV
Transurban Group
Union Pacific Corp.
United Continental Holdings Inc.
United Parcel Service Inc.
US Airways Group Inc.
Yamato Holdings Co. Ltd.
YRC Worldwide Inc.

Appendix:

Methodology

Trimmed average

Our conclusions are based on a statistical analysis of the ratios. In a tax benchmarking exercise of this nature, particular ratios may be distorted because of one-off, non-recurring items. For example, exceptional items often attract associated tax at rates far from the statutory rate.

The study consistently excludes these extreme values by taking a trimmed average of a particular sample. The trimmed average is the average result of the data, derived by excluding 15% of the data points from both the top and bottom of the data set. It is a robust estimate of the location of a sample, excluding outlying data points.

Quartiles

These record the ratio where 75% (Quartile 3) and 25% (Quartile 1) of the sample companies lie below these points. By displaying results in this manner, it is possible to identify the range in which the results of the majority of companies fall.

To have a deeper conversation about how this subject may affect your business, please contact:

Michael W. Burak
US and Global Industrial Products
Tax Leader
973.236.4459
michael.burak@us.pwc.com

Robert Cauley
US Engineering and Construction
Tax Leader
703.918.3283
robert.cauley@us.pwc.com

Janet Kerr/Duygu Turkoglu
Tax Rate Benchmarking
+44.20.7804.7134
janet.kerr@uk.pwc.com/
duygu.x.turkoglu@uk.pwc.com

Don Longano
Principal, Washington National
Tax Services
202.414.1647
don.longano@us.pwc.com

Michael Tomera
US Metals Tax Leader
412.355.6095
michael.tomera@us.pwc.com

Phillip Galbreath
Director, Tax Knowledge Management
202.414.1496
phillip.galbreath@us.pwc.com

Jamie B. Grow
US Aerospace and Defense
Tax Director
703.918.3458
james.b.grow@us.pwc.com

Michael J. Muldoon
US Transportation and Logistics
Tax Leader
904.366.3658
michael.j.muldoon@us.pwc.com

Thomas A. Waller
US Industrial Products
Marketing Director
973.236.4530
thomas.a.waller@us.pwc.com

Matthew H. Bruhn
US Chemicals Tax Leader
973.236.5588
matthew.bruhn@us.pwc.com

Geoffrey Armstrong
Principal, Transfer Pricing
267.330.5374
geoffrey.k.armstrong@us.pwc.com

Diana Garsia
US Industrial Products
Marketing Manager
973.236.7624
diana.t.garsia@us.pwc.com

FSC LOGO HERE

This publication is printed on Mohawk Options 100PC. It is a Forest Stewardship Council™ (FSC®) certified stock using 100% post consumer waste (PCW) fiber and manufactured with renewable, non-polluting, wind-generated electricity

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.