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Natural Hedges and the Management of Foreign Currency Risk

An Effective Antidote to Hedge Accounting

Executive Summary

Natural hedges offer a low-cost and often no-cost alternative to the costs and restatement risks associated with hedge accounting. In this report we look at the use of natural hedges to reduce the balance sheet risk and earnings volatility associated with foreign currency exposure. Our objective is to clarify terminology and identify how natural hedges are being used in practice.

Using a sample of disclosures from 70 companies we find that many firms are using pure natural hedges, a simple by-product of a firm's operations, to address foreign currency risk. However, derivatives that are not designated as accounting hedges, referred to here as quasi-natural hedges, are also frequently used. Often, especially for large multinationals, a consolidated or entity-wide approach is used in offsetting foreign currency risk. In evaluating how hedges are being used in practice we noted that a majority of firms are using natural or quasi-natural hedges to offset foreign currency revenues and expenses, foreign currency assets and liabilities or foreign currency receivables and payables.

With the results provided in this report, financial managers and CFOs as well as outside investors will gain insight into how firms are using natural hedges to limit earnings volatility while avoiding the costs and risks associated with hedge accounting. Also, evidence on how firms are using natural hedges to reduce the need for hedge accounting should provide helpful input to the FASB.

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**Georgia Tech Financial Analysis Lab
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Georgia Tech Financial Analysis Lab

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Natural Hedges and the Management of Foreign Currency Risk An Effective Antidote to Hedge Accounting

By Eugene E. Comiskey and Charles W. Mulford

Introduction

When designated for hedge accounting, derivative financial instruments offer companies the means to reduce or eliminate earnings volatility derived from changes in the fair value of assets and liabilities or of anticipated future transactions. For example, with hedge accounting, a loss on an underlying Yen-denominated receivable would be offset with a gain on a forward contract to sell the Yen. No net earnings effect would be reported. Similarly, a gain on an interest rate swap used to hedge variable rate debt and effectively convert it to a fixed rate obligation would not be recorded immediately but would be deferred in accumulated other comprehensive income until the debt or the swap agreement were settled. Or, as a third example, with hedge accounting, a gain on a futures contract designed to hedge the planned purchase of jet fuel would also be deferred in other comprehensive income. That gain would be recognized and netted against the cost of the jet fuel when it was purchased later. Thus, through hedge accounting, gains and losses on derivatives are matched against losses and gains on the underlying positions they are designed to hedge. By matching and ultimately netting gains and losses, earnings volatility is reduced.

In a research report titled *The Non-designation of Derivatives as Hedges for Accounting Purposes* published in 2008, however, we noted that often firms choose not to designate derivatives as hedges for accounting purposes.¹ On the surface, such a finding would appear to be counterintuitive. Why would firms risk increased earnings volatility by not applying hedge accounting? We found that the reasons are many and varied, and can be grouped into five general categories: (1) the substantial cost of documentation and ongoing monitoring of designated hedges; (2) the availability of natural hedges that can be highly effective; (3) a new accounting standard that broadens the applicability of natural or economic hedges; (4) qualifying hedges were not available or were too costly or documentation was untimely, inadequate or unavailable; and (5) the increased risk of restatement that accompanies hedge accounting.

Looking more closely at the second reason, the availability and effectiveness of natural hedges, we found that firms were not necessarily experiencing increased earnings volatility in the absence of formal hedge accounting. That is, they were using what are often referred to as economic or natural hedges to offset the market value risk of on-balance-sheet asset or liability positions. Under a recent accounting standard, ASC825-10-25, *The Fair Value*

¹ Georgia Tech Financial Analysis Lab, *The Non-designation of Derivatives as Hedges for Accounting Purposes*, (Atlanta, GA: Georgia Tech Financial Analysis Lab), September 2008.

Option for Financial Assets and Financial Liabilities, firms are permitted to mark hedges as well as their on-balance-sheet financial asset or liability positions to market and include those market value changes in earnings.² To the extent that the hedges actually hedge or offset the effects on earnings of changes in the fair value of on-balance-sheet assets and liabilities, no net earnings effect would be experienced. As such, firms would be able to achieve reduced earnings volatility without the need to apply so-called “hedge accounting.”³

In a recent Exposure Draft, *Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities*, the FASB proposes to simplify the application of hedge accounting.⁴ Rather than requiring that a hedging relationship is highly effective in achieving offsetting changes in fair values or cash flows, the Exposure Draft applies a *reasonably effective* criterion. Further, the Exposure Draft permits a qualitative rather than a quantitative assessment in establishing that an economic relationship exists between the hedging instrument and the hedged item. These changes will enable firms to more easily apply hedge accounting and should reduce the risk of a restatement associated with an improper application of the accounting standard.

Yet even under this proposed simplified approach to hedge accounting, firms must still document the risk management objective expected to be achieved by a hedging relationship and how the hedging instrument is expected to manage the risks inherent in the hedged item or forecasted transaction. Further, the earnings effect of any hedge ineffectiveness must continue to be reflected in earnings even when there are no offsetting effects from the hedged item. Thus, adoption of the provisions of the Exposure Draft and the introduction of a simplified approach to hedge accounting will not necessarily lead firms to embrace hedge accounting anew. Rather, we think that firms will continue to employ natural hedges and fair value accounting to achieve the objective of reduced earnings volatility without any of the attendant documentation requirements or risks of restatement associated with hedge accounting.

²Financial Accounting Standards Board, Accounting Standards Codification 825-10-25: *The Fair Value Option for Financial Assets and Financial Liabilities*, (Norwalk, CT: FASB), February 2007.

³ It should be noted that ASC 825-10-25 only applies to on-balance-sheet financial assets and liabilities. Accordingly, it would appear that the use of natural hedges to reduce earnings volatility while avoiding hedge accounting cannot be applied to off-balance-sheet items such as positions related to future cash flows or to anticipated transactions. However, to the extent that a natural hedge is also an off-balance-sheet item entailing the receipt or payment of future cash flows or involving an anticipated transaction, it too can be used to reduce earnings volatility while avoiding hedge accounting.

⁴ Financial Accounting Standards Board, Proposed Accounting Standards Update, *Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities*, (Norwalk, CT: FASB), May 2010.

Purpose

In this report we examine more closely the use of natural hedges. Given their effectiveness in limiting earnings volatility while bypassing the risks associated with hedge accounting, natural hedges are gaining in importance to the financial management of the firm. Our objective is to clarify terminology and identify how natural hedges are being used in practice. With the results provided in this report, financial managers and CFOs as well as outside investors will gain insight into how firms are using natural hedges to limit earnings volatility while avoiding the costs and risks associated with hedge accounting. Recently, the FASB issued a Discussion Paper to solicit input on how to improve, simplify, and converge with International Financial Reporting Standards the financial reporting requirements for hedging activities.⁵ Evidence on how firms are using natural hedges to reduce the need for hedge accounting should provide helpful input to the FASB.

Natural Hedges and Foreign Currency Risk

In the paper, we focus on an important and growing contributor to earnings volatility and balance sheet risk – the risk associated with movements in foreign currencies. A firm faces foreign-currency risk primarily in three different ways. In the first, a company enters into a transaction that is denominated in a foreign currency. For example, a U.S. company may purchase goods from a Canadian supplier in a transaction denominated in the Canadian dollar. The U.S. company would record a Canadian dollar payable, an on-balance-sheet foreign-denominated liability. If the Canadian dollar were to appreciate against the U.S. dollar, the U.S. company would incur a loss on that payable. A second way in which a firm faces foreign-currency risk is through the anticipated future receipt or payment of foreign currencies. For example, a U.S. air-transport company doing business in Japan may expect to receive Yen-denominated revenues in the future. The dollar value of those revenues would decline if the Yen depreciated relative to the U.S. dollar. A third manner in which companies face foreign-currency risk is through net investments in unconsolidated foreign entities or consolidated foreign subsidiaries. For example, a U.S. company would reap a gain on the unconsolidated net investment in an Australian company if the Australian dollar were to appreciate relative to the U.S. dollar. A parent company would also reap a gain on an appreciation in the local currency in which a consolidated foreign subsidiary operates.⁶

All three ways in which companies face foreign currency risk, foreign currency transactions, the anticipated future receipt or payment of foreign currencies, and net investments in foreign entities, result in situations where firms may seek risk-reducing opportunities. Natural

⁵ Financial Accounting Standard Board, Discussion Paper: *Selected Issues about Hedge Accounting*, (Norwalk, CT: FASB), February 2011.

⁶ That gain may or may not be reported in income depending on whether the foreign currency is considered to be the primary currency in which the subsidiary functions and whether the foreign currency is considered to be highly inflationary.

hedges, absent the documentation requirements and restatement risk associated with hedge accounting, provide an important means for reducing the risk associated with foreign currency positions.

Our research approach is to search 10-K Annual Reports to the SEC that reference foreign-currency-related natural hedges or natural offsets. Almost all of the sample firms reviewed in the study have fiscal years that end in 2009, though some early 2010 filings are also included.⁷ From the reviewed statements we compile a sample of 70 firms with natural hedges. Excerpts from the financial statements of these 70 companies where references are made to their use of natural hedges are provided in Appendix 1.⁸

In the paragraphs that follow we review terminology for hedge positions that surfaced in our examination of financial statement filings.

Pure Natural Hedges

Pure natural hedges are outstanding positions that are simply the by-product of a firm's normal business or operational activities. They just occur as part of the business. A pure natural hedge in a foreign currency context is one that offsets exposure in a foreign currency. No formal hedge accounting treatment is needed.

For example, in the case of the above firm with the Canadian dollar payable, which is a foreign-currency transaction balance, a pure natural hedge would entail a pre-existing position in a Canadian dollar asset, such as a receivable. A company that is purchasing from Canadian suppliers may also be selling into the Canadian market, generating Canadian dollar receivables in the process. A gain on a Canadian dollar receivable would offset any loss on the Canadian dollar payable.

As an additional example, consider the following statement made by Honeywell International, Inc.,

“We attempt to hedge transaction exposures with natural offsets to the fullest extent possible . . .”⁹

To the extent they are available, Honeywell is using pure natural hedges to reduce foreign currency transaction risk.

⁷ The search terms natural hedge(s) and natural offset(s) were used in SEC filings made between June 30, 2009 and April 25, 2010.

⁸ In addition to the 70 firms included in Appendix 1, seven additional firms that used natural hedges to reduce foreign currency risk are highlighted in the text.

⁹ Honeywell International, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, pp. 42 – 43.

In the case of the U.S. air-transport company that is doing business in Japan, a pure natural hedge of the firm's future Yen-denominated revenues would entail paying in Yen certain future operating expenses related to its Japanese operations. A decline in the dollar value of the company's Yen-denominated revenues would be offset with an accompanying decline in the dollar value of its yen-denominated expenses. As another example of a firm using pure natural hedges to reduce the risk associated with future receipts and payments of foreign currencies, consider TRW Automotive Holdings Corp. As noted by the company,

“We utilize derivative financial instruments to manage foreign currency exchange rate risks. Forward contracts, and to a lesser extent options, are utilized to protect our cash flow from adverse movements in exchange rates. Foreign currency exposures are reviewed monthly and any natural offsets are considered prior to entering into a derivative financial instrument.”¹⁰

The company uses derivatives to mitigate the foreign currency risk of future cash flows. Such instruments would not be considered to be pure natural hedges. However, the company's reference to “natural offsets” is a reference to the use of pure natural hedges.

Consider too Benchmark Electronics, Inc. The company notes,

“Our international operations in some instances operate in a natural hedge because both operating expenses and a portion of sales are denominated in local currency.”¹¹

Benchmark is mitigating foreign exchange risk by netting the foreign currency exposure of operating expenses against sales revenue.

For the U.S. company with a net investment in an Australian firm, a pure natural hedge of the Australian dollar investment would entail a pre-existing Australian-dollar borrowing. Any gain on the net investment in the Australian company would be offset with losses on the Australian dollar obligation, and vice versa. As an additional example of a pure natural hedge of a net investment in a foreign entity, consider Simon Property Group, L.P. The company writes,

¹⁰ TRW Automotive Holdings Corp., Form 10-K Annual Report to the SEC, December 31, 2009, p. 75.

¹¹ Benchmark Electronics, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 38.

“We have also funded our European investments with Euro-denominated borrowings that act as a natural hedge against local currency fluctuations. This has also been the case with our Premium Outlet Centers in Japan and Mexico where we use Yen and Peso denominated financing, respectively We have also funded our European investments with Euro-denominated borrowings that act as a natural hedge against local currency fluctuations.”¹²

The company has used foreign-currency borrowings to mitigate the foreign exchange risk of foreign denominated investments.

A parent company with a net asset position in a consolidated foreign subsidiary could mitigate its foreign exchange risk by funding its operations with borrowings in the local currency. These borrowings would offset the parent company’s net asset position in the foreign subsidiary. As an example, consider the case of The Valspar Corp. The company notes,

"We have not hedged our exposure to translation gains and losses; however, we have reduced our exposure by borrowing funds in local currencies.”¹³

The company has borrowed locally to offset the foreign exchange risk of its net asset exposure.

One of the more significant appeals of pure natural hedges is that they can mitigate foreign currency risk without burdening the firm with any associated costs. That is, pure natural hedges require no incremental fees that might be incurred, for example, the additional costs of a derivatives position, nor do they require any special actions on the part of management.

Often, larger multinational firms use a consolidated or aggregated approach in determining offsetting foreign currency exposures. That is, pure natural hedges are achieved by netting asset positions in one entity against liability positions in another. As an example of this consolidated approach consider the case of Activision Blizzard, Inc. The company discloses,

"To manage the volatility, we aggregate exposures on a consolidated basis to take advantage of natural offsets”¹⁴

Bio-Rad Laboratories, Inc. writes,

¹² Simon Property Group, L.P., Form 10-K Annual Report to the SEC, December 31, 2009, p. 64.

¹³ The Valspar Corp., Form 10-K Annual Report to the SEC, October 30, 2009, p. 20.

¹⁴ Activision Blizzard, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 55.

"Foreign currency exposures are managed on a centralized basis. This allows for the netting of natural offsets and lowers transaction costs and net exposures."¹⁵

And as an additional example, Zimmer Holdings, Inc. notes,

"We manage the foreign currency exposure centrally, on a combined basis, which allows us to net exposures and to take advantage of any natural offsets."¹⁶

Quasi-natural Hedges

In some cases hedges characterized as natural go beyond being the simple byproduct of a firm's operations. Consider, for example, the case of Federal Signal Corp. As noted by the company,

"Forward exchange contracts are recorded as a natural hedge when the hedged item is a recorded asset or liability that is revalued each accounting period, in accordance with ASC Topic 830, Foreign Currency Matters."¹⁷

A similar example is provided by Watts Water Technologies, Inc. The company describes its hedging activities as follows,

"On occasion, the Company may enter into a derivative instrument that does not qualify for hedge accounting because it is entered into to offset changes in the fair value of an underlying transaction which is required to be recognized in earnings."¹⁸

While both the Federal Signal and Watts Water Technology examples might be considered to be natural hedges, they are clearly more than simple operational by-products. In both cases foreign currency derivatives are employed to achieve the offsetting positions. This active engagement of a hedged position leads us to the term, "quasi-natural hedge." The companies are employing actively-created asset or liability positions to offset the risk associated with outstanding foreign currency balances. However, the hedged positions are not afforded formal hedge accounting treatment and, as such, are a form of natural hedge.

¹⁵ Bio-Rad Laboratories, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 29.

¹⁶ Zimmer Holdings, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 32.

¹⁷ Federal Signal Corp., Form 10-K Annual Report to the SEC, December 31, 2009, p. 24.

¹⁸ Watts Water Technologies, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 64.

While characterized as a pure natural hedge, the earlier example for The Valspar Corp. could be considered a quasi-natural hedge. The company actively borrowed in local currencies to offset foreign exchange exposure. The borrowings would be considered a pure natural hedge if the company were to take out the loans as part of its normal funding of operations. If the loans were designed to mitigate foreign exchange risk, then they would be considered a quasi-natural hedge.

Quasi-natural hedges involve some costs that are not incurred with pure natural hedges. This is clearly the case when derivatives are employed. However, some costs may also be associated with the other quasi-natural hedges such as fees associated with corporate borrowings.

Economic Hedges

An economic hedge typically refers to the use of a derivative instrument that has not been designated as an accounting hedge. As such, it is effectively a quasi-natural hedge. Consider, for example, the case of First Data Corp. The company makes the following disclosure,

“At December 31, 2009, the Company had certain derivative instruments that functioned as economic hedges but no longer qualify or were not designated to qualify for hedge accounting. Such instruments included a cross-currency swap to hedge foreign currency exposure from an intercompany loan, cross-currency swaps to hedge an investment in a foreign subsidiary from fluctuations in foreign currency exchange rates”¹⁹

TJX Companies also uses the economic hedge terminology,

“TJX enters into forward foreign currency exchange contracts to obtain economic hedges on firm U.S. dollar and Euro denominated merchandise purchase commitments”²⁰

Notice that First Data initially designated its derivative as an accounting hedge. However, circumstances changed and the derivative no longer met accounting-hedge requirements, leaving an economic (i.e., quasi-natural) hedge in its place. On the other hand, TJX apparently enters into FX derivatives without the intent of seeking their qualification for hedge accounting.

¹⁹ First Data Corp., Form 10-K Annual Report to the SEC, December 31, 2009, p. 131.

²⁰ TJX Companies, Inc., Form 10-K Annual Report to the SEC, January 30, 2010, p. F-14.

Mark-to-market Hedges

A mark-to-market hedge appears to be the same as an economic hedge--though we found this expression to be used less frequently than economic hedge. Consider Hanesbrands, Inc. The company notes,

" Foreign exchange derivative contracts are recorded as mark to market hedges when the hedged item is a recorded asset or liability that is revalued in each accounting period."²¹

While a different expression is used in the above case, a mark-to-market hedge does not appear to differ from either the economic hedge or a natural hedge in the case where a derivative is employed but hedge-accounting treatment is not applied.

Free-standing Hedges

The derivatives associated with free-standing hedges also appear to be comparable to economic hedges and quasi-natural hedges. In the case of free-standing hedges, however, the reporting company does not appear to identify specifically what foreign currency position is being hedged. Consider Medtronic, Inc. The company notes,

"The Company uses forward exchange contracts to offset its exposure to the change in value of certain foreign denominated intercompany assets and liabilities. These forward exchange contracts are not designated as hedges, and therefore, changes in value of these freestanding derivatives are recognized in earnings, thereby offsetting the current earnings effect of the related currency denominated assets and liabilities."²²

Accounting-designated Hedges

While our focus in this report is on natural hedges and not accounting-designated hedges, to complete our review of hedge-related terminology, we felt it necessary to address the terminology associated with hedge accounting. In a foreign-currency context, accounting hedges predominately involve currency derivatives that are used to hedge (a) recognized foreign currency-denominated assets and liabilities and firm commitments; (b) projected foreign currency cash flows; and (c) net investments in foreign entities. The labels given the hedges of each of these sources of foreign currency risk are fair value hedges, cash flow hedges, and hedges of net investments in foreign entities, respectively. Special accounting treatment is applied in each of these cases when the requirements for hedge accounting,

²¹ Hanesbrands, Inc., Form 10-K Annual Report to the SEC, January 2, 2010, p. F-34.

²² Medtronic, Inc., Form 10-K Annual Report to the SEC, April 24, 2009, p. 38.

including the designation of the derivative as a hedge, and the ongoing monitoring and documentation of the hedge's effectiveness, are met.²³

Fair-value Hedge

A fair-value hedge is a derivative that hedges the exposure to changes in the fair value of a recognized asset or liability or a firm commitment. Any gain or loss on the derivative is recognized in earnings currently together with an offsetting loss or gain on the item being hedged. As an example, consider TJX Companies, Inc. The company notes,

"TJX also enters into derivative contracts, generally designated as fair value hedges, to hedge intercompany debt and intercompany interest payable. The changes in fair value of these contracts are recorded in selling, general and administrative expenses and are offset by marking the underlying item to fair value in the same period."²⁴

Cash-flow Hedge

A cash-flow hedge is a derivative that is used to hedge the foreign currency risk associated with the future cash flows of a forecasted transaction. Gains and losses on such a derivative are initially excluded from earnings and reported as a component of other comprehensive income. They are subsequently reclassified to income when the forecasted transaction affects earnings. Consider the example of Blyth, Inc. As reported by the company,

"We have designated our forward exchange contracts on forecasted intercompany purchases and future purchase commitments as cash flow hedges and, as such, as long as the hedge remains effective and the underlying transaction remains probable, the effective portion of the changes in the fair value of these contracts will be recorded in AOCI [accumulated other comprehensive income] until earnings are affected by the variability of the cash flows being hedged."²⁵

²³ Refer to SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, (Norwalk, CT: Financial Accounting Standards Board, 1998), SFAS No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities, an amendment of SFAS No. 133*, (Norwalk, CT: Financial Accounting Standards Board, 2000), SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities, an Amendment of SFAS No. 133*, (Norwalk, CT: Financial Accounting Standards Board, 2008) and Proposed Accounting Standards Update, *Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities*, (Norwalk, CT: Financial Accounting Standards Board, 2010).

²⁴ TJX Companies, Inc., Form 10-K Annual Report to the SEC, January 30, 2010, p. F-14.

²⁵ Blyth, Inc., Form 10-K Annual Report to the SEC, January 31, 2010, p. 40.

Net investment Hedge

In a net investment hedge, a derivative is designated as hedging the foreign currency exposure of a net investment in a foreign operation. In such a case, the gain or loss on the derivative is excluded from earnings and reported in other comprehensive income until some or all of the investment position is liquidated. As noted by TJX Companies, Inc.,

"TJX applied hedge accounting to these hedge contracts of our investment in foreign subsidiaries, and changes in fair value of these contracts, as well as gains and losses upon settlement, were recorded in accumulated other comprehensive income, offsetting changes in the cumulative foreign translation adjustments of the foreign subsidiaries."²⁶

Classifications of Foreign Currency Natural Hedges

The 70-firm sample in Appendix 1 should provide insight into the current characterization of natural hedges. As we worked through the 10-K disclosures, seven general categories of natural hedges emerged. The seven categories and the frequency with which each appeared are provided in Exhibit 1.

²⁶ TJX Companies, Inc., Form 10-K Annual Report to the SEC, January 30, 2010, p. F-14.

Exhibit 1: Classification of Natural Hedges

Classification	In The Sample		
	Frequency	Percentage	Cumulative %
1. Offsetting of revenues and expenses	35.0	46.0	46.0
2. Offsetting foreign-currency assets and liabilities or assets offset with local borrowings	13.0	17.0	63.0
3. Offsetting receivables and payables	8.0	10.0	73.0
4. Manufacturing or sourcing goods in the currency of the country of sale	7.0	9.0	82.0
5. Employing derivatives without a hedge- accounting designation	4.0	6.0	88.0
6. Maintaining foreign-currency cash balances	3.0	4.0	92.0
7. Other natural hedges	<u>6.0</u>	<u>8.0</u>	<u>100.0</u>
Total	<u>76.0</u>	<u>100.0</u>	<u>100.0</u>

These classifications were used to describe the manner in which natural hedges were employed in the sample of 70 companies provided in Appendix 1. The hedging strategy used by some firms could be classified into more than one category, leading to more than 70 classification examples.

Offsetting Revenues and Expenses

The offsetting of foreign currency revenues and expenses is by far the most common of the natural hedges and represents 46 percent of those identified in the 70-firm sample. These natural hedges are pure in nature since they are simply the product of normal business operations. Four typical examples from the 70-firm sample are provided below:

Adobe Systems, Inc.:

"As a general rule, we do not use financial instruments to hedge local currency denominated operating expenses in countries where a natural hedge exists. For example, in many countries, revenue from the local currency product licenses substantially offsets the local currency denominated operating expenses."²⁷

Meridian Bioscience Corp.:

"Our US Diagnostics operating segment markets and sells certain Meridian-branded diagnostic test kits that are sourced from European suppliers in Spain and Germany. These kits are purchased in Euros, which provides a natural hedge to gross profit and operating income on a consolidated basis."²⁸

Pregis Holding II Corp.:

"We have a natural hedge in our operations, as we typically produce, buy raw materials, and sell our products in the same currency."²⁹

Rightnow Technologies, Inc.:

"Expenses associated with international revenue are generally paid in local currency, which generally provides a natural hedge to offset the revenue impact."³⁰

Offsetting Assets and Liabilities

Next in frequency to the offsetting of revenues and expenses are natural hedges designed to offset foreign-currency assets and liabilities. Brush Engineering Materials reports such a case:

"We attempt to minimize the effects of these exposures through the use of natural hedges, which include pricing strategies, borrowings denominated in

²⁷ Adobe Systems, Inc., Form 10-K Annual Report to the SEC, November 27, 2009, p. 73.

²⁸ Meridian Bioscience Corp., Form 10-K Annual Report to the SEC, September 30, 2009, p. 25.

²⁹ Pregis Holding II Corp. Form 10-K Annual Report to the SEC, December 31, 2009, p. 48.

³⁰ Rightnow Technologies, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 45.

the same terms as the exposed asset, off-balance sheet arrangements and other methods."³¹

In the case of Brush Engineering, the label of pure natural hedge would not appear to be appropriate. That is, the company appears to shape the denomination and terms of its borrowings to match its assets. As such, we would refer to their natural hedge position as a quasi-natural hedge as opposed to a pure natural hedge. Two additional examples of quasi-natural hedges offering offsetting asset and liabilities exposure follow.

CC Media Holdings, Inc.:

"We believe we mitigate a small portion of our exposure to foreign currency fluctuations with a natural hedge through borrowings in currencies other than the U.S. dollar."³²

Johnson Controls, Inc.:

"The Company selectively finances its foreign operations with local, non-U.S. dollar debt. In those instances, the foreign currency denominated debt serves as a natural hedge of the foreign operations' net asset positions."³³

It is common for firms to incur debt in the currency of its foreign investments or subsidiaries as a hedge against the net asset exposure in those entities. Johnson Controls appears to have such a hedge inasmuch as it references foreign operations and net asset positions.

Offsetting Receivables and Payables

The mitigation of risk associated with foreign currency receivables and payables is a pure natural hedge comparable to the offsetting of foreign currency revenues and expenses. Hence, we treat them separately from the quasi-natural hedges of offsetting assets and liabilities above. The origin of the receivables and payables are of course linked to earnings of revenues and the incurrence of expenses. Two examples follow.

³¹ Brush Engineered Materials, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 48.

³² CC Media Holdings, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 67.

³³ Johnson Controls, Inc. Form 10-K Annual Report to the SEC, September 30, 2009, p. 41.

Bucyrus International, Inc.:

"[o]ftentimes the Company has non-functional-currency-denominated receivables from customers for which the exposure is partially mitigated by a corresponding non-functional currency payable to a vendor."³⁴

Maxwell Technologies, Inc.:

"Maxwell uses forward contracts to hedge certain monetary assets and liabilities, primarily receivables and payables, denominated in a foreign currency. The change in fair value of these instruments represents a natural hedge as gains and losses offset the changes in the underlying fair value of the monetary assets and liabilities due to movements in currency exchange rates. These contracts generally expire in one month. These contracts are considered economic hedges and are not designated as hedges under the Derivatives and Hedging Topic of the FASB ASC, and therefore, the change in the instrument's fair value is recognized currently in earnings."³⁵

In the Bucyrus disclosure, the "non-functional-currency" is simply the foreign currency, which is a currency other than the one in which Bucyrus operates. It is not uncommon for a firm to operate in a currency other than the one of the country in which they are domiciled. However, their financial statements will be prepared using the local-country currency. Notice, in line with our earlier discussion, that the Maxwell Technologies hedges are achieved using foreign currency derivatives that are considered to be both economic and natural hedges.

Manufacturing or Sourcing Goods in the Currency of the Country of Sale

When invoiced in a foreign currency, sales of goods into a foreign country that are produced in the United States create foreign currency asset exposure. This exposure can be hedged, for example, by selling the anticipated receipt of foreign currency through a forward contract. Alternatively, some firms elect to moderate their exposure by either manufacturing or sourcing their goods for sale in the foreign country. Molex and PerkinElmer provide examples of this strategy.

³⁴ Bucyrus International, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 16.

³⁵ Maxwell Technologies, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, p. 75.

Molex, Inc.:

"We mitigate our foreign currency exchange rate risk principally through the establishment of local production facilities in the markets we serve. This creates a "natural hedge" since purchases and sales within a specific country are both denominated in the same currency and therefore no exposure exists to hedge with a foreign exchange forward or option contract . . ."³⁶

PerkinElmer, Inc.:

"Moreover, we are able to partially mitigate the impact that fluctuations in currencies have on our net income as a result of our manufacturing facilities located in countries outside the United States, material sourcing and other spending which occur in countries outside the United States, resulting in a natural hedge."³⁷

Employing Derivatives without a Hedge-accounting Designation

Some firms in our sample used foreign currency derivatives to hedge recorded assets and liabilities and explicitly indicated that they were not seeking to apply hedge accounting. On the surface, the use of derivatives to hedge foreign currency risk would not appear to be a natural or even quasi-natural hedge. However, because the firms did not apply hedge accounting, the derivatives positions effectively became quasi-natural hedges. We provide examples from Dell, Inc. and Federal Signal below. Both firms make reference to the use of derivatives as either natural or as economic hedges.

Dell, Inc.:

"Dell uses forward contracts to hedge monetary assets and liabilities, primarily receivables and payables, denominated in a foreign currency. The change in the fair value of these instruments represents a natural hedge as their gains and losses offset the changes in the underlying fair value of the monetary assets and liabilities due to movements in currency exchange rates These contracts are considered economic hedges and are not designated as hedges under derivative instruments and hedging activities accounting, and therefore, the change in the instrument's fair value is recognized currently in earnings as a component of interest and other, net."³⁸

³⁶ Molex, Inc., Form 10-K Annual Report to the SEC, June 30, 2009, p. 42.

³⁷ PerkinElmer, Inc., Form 10-K Annual Report to the SEC, January 3, 2010, p. 62.

³⁸ Dell, Inc., Form 10-K Annual Report to the SEC, January 29, 2010, p. 23-24.

Federal Signal Corp.:

“Forward exchange contracts are recorded as a natural hedge when the hedged item is a recorded asset or liability that is revalued each accounting period, in accordance with ASC Topic 830, “Foreign Currency Matters” (SFAS No. 52). For derivatives designated as natural hedges, changes in fair values are reported in the “Other income (expense)” line of the Consolidated Statements of Operations.”³⁹

Maintaining Foreign-currency Cash Balances

The last of the separately classified natural hedges involves the maintenance of foreign-currency cash balances. Two of the three cases disclosed in the 70-firm sample are provided below.

Baldwin Technology Company, Inc.:

“The Company also maintains certain levels of cash denominated in various currencies, which acts as a natural hedge against adverse variations in individual currencies.”⁴⁰

Expedia, Inc.:

“To the extent practicable, we minimize our foreign currency exposures by maintaining natural hedges between our current assets and current liabilities in similarly denominated foreign currencies. Additionally, during 2008, we began using foreign currency forward contracts to economically hedge certain merchant revenue exposures and in lieu of holding certain foreign currency cash and accounts receivable for the purpose of economically hedging our foreign currency-denominated operating liabilities.”⁴¹

In the case of Baldwin Technology it would appear that the company has foreign currency liabilities that it seeks to hedge. Foreign currency cash balances provide a natural hedge of that exposure. In the Expedia example, the company is adopting the use of forward contracts

³⁹ Federal Signal Corp., Form 10-K Annual Report to the SEC, December 31, 2009, p. 24.

⁴⁰ Baldwin Technology Company, Inc., Form 10-K Annual Report to the SEC, June 30, 2009, p. 30.

⁴¹ Expedia, Inc., Form 10-K Annual Report to the SEC, December 31, 2009, pp. 57-58.

to hedge foreign currency exposure and is moving away from employing foreign currency cash balances for that purpose.

Other Natural Hedges

The first six classifications of natural hedges in Exhibit 1 make up 92 per cent of those located in the sample of 70 firms that disclosed the use of natural hedges or natural offsets. A few other naturals also surfaced. For example, Aecom Technology and AES Corp. use pricing strategies, i.e., the selection of specific currencies for payment, to mitigate foreign currency risk.

Aecom Technology Corp.:

“The Company limits exposure to foreign currency fluctuations in most of its contracts through provisions that require client payments in currencies corresponding to the currency in which costs are incurred. As a result of this natural hedge, the Company generally does not need to hedge foreign currency cash flows for contract work performed.”⁴²

AES Corp.:

“These subsidiaries and affiliates have attempted to limit potential foreign exchange exposure by entering into revenue contracts that adjust to changes in foreign exchange rates.”⁴³

Summary and Conclusions

In this research report we review the financial statements of 70 firms to gain an understanding of the use of natural hedges to mitigate foreign currency risk. Several concluding observations can be made.

1. With natural hedges, balance sheet risk and earnings volatility can be reduced without the costs and restatement risks associated with hedge accounting.
2. Various terms can be applied to natural hedges, including pure natural, quasi-natural, economic, mark-to-market and free-standing hedges.

⁴² Aecom Technology Corp., Form 10-K Annual Report to the SEC, September 30, 2009, p. 33.

⁴³ AES Corp., Form 10-K Annual Report to the SEC, December 31, 2009, p. 141.

3. Firms assess the availability of natural hedges, a simple by-product of a firm's operations and a no-cost approach for gaining the benefits of hedges, before considering the need for derivative instruments to hedge foreign currency exposure.
4. A consolidated or centralized approach is often used when evaluating and hedging foreign currency exposure.
5. A significant portion of the natural hedges employed, 73 percent, could be classified into one of three categories: the offsetting of foreign currency revenues and expenses, the offsetting foreign currency assets and liabilities or assets offset with local borrowings, and offsetting receivables and payables.
6. Other natural hedges entail moving manufacturing to countries where sales are made, employing derivatives without a hedge-accounting designation, maintaining foreign currency cash balances and other natural hedges.

Appendix 1: Sample Companies and Natural Hedge Disclosures

1. ACI Worldwide, Inc. (12/31/2009, p. 55)

We at times enter into revenue contracts that are denominated in the country's local currency, principally in Australia, Canada, the United Kingdom and other European countries. This practice serves as a natural hedge to finance the local currency expenses incurred in those locations. We have not entered into any foreign currency hedging transactions.

2. Activision Blizzard, Inc. (12/31/2009, p. 58)

We are exposed to fluctuations in foreign currency exchange rates. To manage the volatility, we aggregate exposures on a consolidated basis to take advantage of natural offsets Most large European revenue contracts are denominated and paid to us in the U.S. dollar while our European expenses, including substantial research and development operations, are paid in local currencies causing a short position in the euro and the British pound. In addition, we experience greater inflows than outflows of Japanese yen as almost all Japanese-based customers contract and pay us in Japanese yen. While these exposures are aggregated on a consolidated basis to take advantage of natural offsets, substantial exposure remains.

3. Active Power, Inc. (12/31/2009, pp. 43-44)

Those sales and expenses in currencies other than U.S. dollars can result in translation gains and losses which have not been significant to date. Currently, we do not engage in hedging activities for our international operations other than an increasing amount of sales and support expenses being incurred in foreign currencies as a natural hedge. However, recent volatility in currencies, particularly with the pound and Euro, is increasing the amount of potential translation gains and losses and we may engage in hedging activities in the future to mitigate the risks caused by such currency volatility.

4. Actividentity Corp. (9/30/2009, p. 47)

We are exposed to currency exchange fluctuations as we sell our products and incur expenses globally. We manage the sensitivity of our international revenue by denominating transactions in U.S. Dollars, Euros, Australian Dollars and British Pounds. A natural hedge exists in some local currencies, to a limited extent, as local currency denominated operating expenses offset some of the local currency denominated revenue.

5. Adobe Systems, Inc. (11/27/2009, p. 73)

As a general rule, we do not use financial instruments to hedge local currency denominated operating expenses in countries where a natural hedge exists. For example, in many countries, revenue from the local currency product licenses substantially offsets the local currency denominated operating expenses. We assess the need to utilize financial instruments to hedge currency exposures, primarily related to operating expenses, on an ongoing basis.

Appendix 1: Sample Companies and Natural Hedge Disclosures

6. Aecom Technology Corp. (9/30/2009, p. 33)

The Company uses forward exchange contracts from time to time to mitigate foreign currency risk. The Company limits exposure to foreign currency fluctuations in most of its contracts through provisions that require client payments in currencies corresponding to the currency in which costs are incurred. As a result of this natural hedge, the Company generally does not need to hedge foreign currency cash flows for contract work performed.

7. Albemarle Corp. (12/31/2009 10K, p. 43)

The primary method we use to reduce foreign currency exposure is to identify natural hedges, in which the operating activities denominated in respective currencies across various subsidiaries balance in respect to timing and the underlying exposures.

8. Amcol International Corp. (12/31/2009, p. 42)

We may manage our foreign currency exchange risk in part through operational means, including managing same currency revenues versus same currency costs as well as same currency assets versus same currency liabilities. We also have subsidiaries with the same currency exposures which may offset each other, providing a natural hedge against one another's currency risk.

9. American Vanguard Corp. (12/31/2009 10K, p. 34)

The Company has mitigated and will continue to mitigate a portion of its currency exchange exposure through natural hedges based on the operation of decentralized foreign operating companies in which the majority of all costs are local-currency based.

10. Armstrong World Industries, Inc. (12/31/2009, p. 47)

We manufacture and sell our products in a number of countries throughout the world and, as a result, are exposed to movements in foreign currency exchange rates. To a large extent, our global manufacturing and sales provide a natural hedge of foreign currency exchange rate movement. We use foreign currency forward exchange contracts to reduce our remaining exposure.

11. Arrow Electronics, Inc. (12/31/2009, p. 40)

The company's policy is to hedge substantially all such currency exposures for which natural hedges do not exist. Natural hedges exist when purchases and sales within a specific country are both denominated in the same currency and, therefore, no exposure exists to hedge with foreign exchange forward, option, or swap contracts (collectively, the "foreign exchange contracts"). In many regions in Asia, for example, sales and purchases are primarily denominated in U.S. dollars, resulting in a "natural hedge." Natural hedges exist in most countries in which the company operates, although the percentage of natural offsets, as compared with offsets that need to be hedged by foreign exchange contracts, will vary from country to country.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

12. Baldwin Technology Company, Inc. (6/30/2009, p. 30)

The Company's policy is to hedge the impact of currency rate fluctuations, which could have a material impact on the Company's financial results. The Company utilizes foreign currency exchange forward contracts to hedge certain of these exposures. The Company also maintains certain levels of cash denominated in various currencies, which acts as a natural hedge against adverse variations in individual currencies.

13. Baxter International, Inc. (12/31/2009, p. 31)

The company manages its foreign currency exposures on a consolidated basis, which allows the company to net exposures and take advantage of any natural offsets. . . Financial market and currency volatility may reduce the benefits of the company's natural hedges and limit the company's ability to cost-effectively hedge these exposures.

14. Belden, Inc. (12/31/2009, p. 32)

For most of our products, the currency in which we sell the product is the same as the currency in which we incur the costs to manufacture the product, resulting in a natural hedge. Our currency exchange rate management strategy involves the use of natural techniques, where possible, such as the offsetting or netting of like-currency cash flows. We do not generally use foreign currency derivatives and did not have any outstanding at December 31, 2009.

15. Benchmark Electronics, Inc. (12/31/2009), p. 38)

Our international operations in some instances operate in a natural hedge because both operating expenses and a portion of sales are denominated in local currency.

16. BioMarin Pharamaceutial, Inc. (12/31/2009, p. 57)

We currently do not use financial instruments to hedge local currency operating expenses in Europe. Instead, we believe that a natural hedge exists, in that local currency revenue substantially offsets the local currency operating expenses.

17. Bio-Rad Laboratories, Inc. (12/31/2009, p. 29)

Foreign currency exposures are managed on a centralized basis. This allows for the netting of natural offsets and lowers transaction costs and net exposures. Where possible, we seek to manage our foreign exchange risk in part through operational means, including matching same-currency revenues to same currency costs, and same-currency assets to same-currency liabilities. Moreover, weakening in one currency can often be offset by strengthening in another currency.

18. BJ Services Co. (9/30/2008), p. 12)

The risk of currency exchange rate fluctuations and its impact on net income are mitigated by using natural hedges in which we invoice for work performed in certain countries in both U.S. dollars and local currency. We attempt to match the amounts invoiced in local currency with the amount of expenses denominated in local currency.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

19. Brush Engineered Materials, Inc. (12/31/2009, p. 48)

We attempt to minimize the effects of these exposures through the use of natural hedges, which include pricing strategies, borrowings denominated in the same terms as the exposed asset, off-balance sheet arrangements and other methods. Where we cannot use a natural hedge, we may use derivative financial instruments to minimize the effects of these exposures when practical and cost efficient.

20. Bucyrus International, Inc. (12/31/2009, p. 16)

The Company also uses natural hedges to mitigate risks associated with foreign currency exposures. For example, oftentimes the Company has non-functional currency denominated receivables from customers for which the exposure is partially mitigated by a corresponding non-functional currency payable to a vendor.

21. CC Media Holdings, Inc. (12/31/2009, p. 67)

We have operations in countries throughout the world. Foreign operations are measured in their local currencies except in hyper-inflationary countries in which we operate. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which we have operations. We believe we mitigate a small portion of our exposure to foreign currency fluctuations with a natural hedge through borrowings in currencies other than the U.S. dollar.

22. Cooper Tire & Rubber Co. (12/31/2009, p. 33)

To manage the volatility of currency exchange exposures related to future sales and purchases, the Company nets the exposures on a consolidated basis to take advantage of natural offsets. For the residual portion, the Company enters into forward exchange contracts and purchases options with maturities of less than 12 months pursuant to the Company's policies and hedging practices.

23. Cott Corp. (1/2/2010, p. 47)

Our primary exposure to foreign currency exchange rates relates to transactions in which the currency collected from customers is different from the currency utilized to purchase the product sold. Beginning in 2010, we entered into foreign currency contracts to hedge some of these currency exposures for which natural hedges do not exist. Natural hedges exist when purchases and sales within a specific country are both denominated in the same currency and, therefore, no exposure exists to hedge with foreign exchange forward, option, or swap contracts (collectively, the "foreign exchange contracts").

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

24. Cray, Inc. (12/31/2009, p. 41)

As of December 31, 2009, we had entered into forward exchange contracts that hedge approximately \$18.5 million of anticipated cash receipts on specific foreign currency denominated sales contracts. These forward contracts hedge the risk of foreign exchange rate changes between the time that the related contracts were signed and when the cash receipts are expected to be received. Our foreign maintenance contracts are typically paid in local currencies and provide a partial natural hedge against foreign exchange exposure.

25. Danaher Corp. (12/31/2009, p. 45)

The Company has generally accepted the exposure to exchange rate movements without using derivative financial instruments to manage this risk. Therefore, both positive and negative movements in currency exchange rates against the U.S. dollar will continue to affect the reported amount of sales, profit, and assets and liabilities in the Company's consolidated financial statements. The Eurobond Notes described below (which as of December 31, 2009 had outstanding borrowings in principal amount equivalent to \$716 million) provide a natural hedge to a portion of the Company's European net asset position.

26. Data Domain, Inc. (12/31/2008, p. 30)

Our sales contracts are mainly denominated in United States dollars for sales in Asia and Japan, denominated in Euros for sales in Europe, British sterling for sales in the United Kingdom and Canadian dollars for certain sales in Canada. We currently do not hedge the operating expenses that are primarily denominated in foreign currency in countries where we have sales or operating personnel because we believe those situations create natural hedges. We may begin to sell our products in local currency in other locations. As we fund our international operations, our cash and cash equivalents are affected by changes in exchange rates for those expenses we do not hedge.

27. Dell, Inc. (1/29/2010, pp. 23-24)

Dell uses forward contracts to hedge monetary assets and liabilities, primarily receivables and payables, denominated in a foreign currency. The change in the fair value of these instruments represents a natural hedge as their gains and losses offset the changes in the underlying fair value of the monetary assets and liabilities due to movements in currency exchange rates These contracts are considered economic hedges and are not designated as hedges under derivative instruments and hedging activities accounting, and therefore, the change in the instrument's fair value is recognized currently in earnings as a component of interest and other, net.

28. DJO Finance (12/31/2009, p. 72)

We use foreign exchange forward contracts to hedge expense commitments that are denominated in currencies other than the U.S. dollar. The purpose of our foreign currency hedging activities is to fix the dollar value of specific commitments and payments to foreign vendors. Before acquiring a derivative instrument to hedge a specific risk, potential natural hedges are evaluated. While our foreign exchange contracts act as economic hedges, we have not designated such instruments as hedges.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

29. Dresser-Rand Group, Inc. (12/31/2009, p. F-11)

The Company manages exposure to changes in foreign currency exchange rates through its normal operating and financing activities, as well as through the use of financial instruments, principally forward exchange contracts. . . . The Company attempts to hedge transaction exposures through natural offsets. To the extent that this is not practicable, the Company may enter into forward exchange contracts. Major exposure areas considered for hedging include foreign currency denominated receivables and payables, firm committed transactions and forecasted sales and purchases.

30. Eastman Chemical Co. (12/31/2009, p. 90)

The Company manufactures and sells its products in a number of countries throughout the world and, as a result, is exposed to movements in foreign currency exchange rates. To manage the volatility relating to these exposures, the Company nets the exposures on a consolidated basis to take advantage of natural

offsets. To manage the remaining exposure, the Company enters into currency options and forwards to hedge probable anticipated, but not yet committed, export sales and purchase transactions expected within no more than five years and denominated in foreign currencies (principally the euro, British pound, and the Japanese yen) and forward exchange contracts to hedge certain firm commitments denominated in foreign currencies.

31. Emcore Corp. (9/30/2009, p. 58)

During the normal course of business, the Company is exposed to market risks associated with fluctuations in foreign currency exchange rates, primarily the Euro. To reduce the impact of these risks on the Company's earnings and to increase the predictability of cash flows, the Company uses natural offsets in receipts and disbursements within the applicable currency as the primary means of reducing the risk. . . . The Company does not currently hedge its foreign currency exposure.

32. Epicor Software Corp. (12/31/2009, p. 24)

The Company operates throughout the world through international sales subsidiaries, networks of exclusive third party distributors, and non-exclusive dealers. As a result, certain sales and related expenses are denominated in currencies other than the United States dollar. The Company's results of operations may fluctuate due to exchange rate fluctuation between the United States dollar and other currencies because our financial results are reported on a consolidated basis in United States dollars and through the use of foreign currency denominated loans available under the Company's credit facility. In an effort to minimize operation fluctuations due to currency movements, we may attempt to limit foreign exchange exposure through operational strategies (e.g. natural hedges, netting, leading and lagging of accounts payables and account receivables) to offset the effects of exchange rate changes.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

33. Expedia, Inc. (12/31/2009, pp. 57-58)

To the extent practicable, we minimize our foreign currency exposures by maintaining natural hedges between our current assets and current liabilities in similarly denominated foreign currencies. Additionally, during 2008, we began using foreign currency forward contracts to economically hedge certain merchant revenue exposures and in lieu of holding certain foreign currency cash and accounts receivable for the purpose of economically hedging our foreign currency-denominated operating liabilities.

34. Federal Signal Corp. (12/31/2009, p. 24)

Forward exchange contracts are recorded as a natural hedge when the hedged item is a recorded asset or liability that is revalued each accounting period, in accordance with ASC Topic 830, "Foreign Currency Matters" (SFAS No. 52). For derivatives designated as natural hedges, changes in fair values are reported in the "Other income (expense)" line of the Consolidated Statements of Operations.

35. First Solar, Inc. (12/26/2009, p. 55)

Most of our German plant's operating expenses are denominated in euros, creating natural hedges against the currency risk in our net sales. In addition, we purchased foreign exchange forward contracts to hedge the exchange risk on forecasted cash flows denominated in euro.

36. General Finance Corp. (6/30/2009, p. F-22)

The Company has transactional currency exposures. Such exposure arises from sales or purchases in currencies other than the functional currency. The currency giving rise to this risk is primarily U.S. dollars. The Company has a bank account denominated in U.S. dollars into which a small number of customers pay their debts. This is a natural hedge against fluctuations in the exchange rate. The funds are then used to pay suppliers, avoiding the need to convert to Australian dollars.

37. H.B. Fuller Co. (11/27/2009, p. 39)

Our objective is to balance, where possible, local currency denominated assets to local currency denominated liabilities to have a natural hedge and minimize foreign exchange impacts. . . . We take steps to minimize risks from foreign currency exchange rate fluctuations through normal operating and financing activities and, when deemed appropriate, through the use of derivative instruments.

38. Honeywell International, Inc. (12/31/2009, pp. 42-43)

We minimize our risks from interest and foreign currency exchange rate and commodity price fluctuations through our normal operating and financing activities and, when deemed appropriate, through the use of derivative financial instrumentsWe attempt to hedge transaction exposures with natural offsets to the fullest extent possible and, once these opportunities have been exhausted, through foreign currency forward and option agreements with third parties.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

39. IDT Corp. (7/31/2008, p. 73)

Our market risk exposure relating to foreign currency exchange is generally not material, as we have cash outflows denominated in foreign currencies to partially offset the cash inflows denominated in the same currencies, thereby creating a natural hedge.

40. Interactive Intelligence, Inc. (12/31/2009, p. 39)

We have not historically used foreign currency options or forward contracts to hedge our currency exposures because of variability in the timing of cash flows associated with our larger contracts Rather, we attempt to mitigate our foreign currency risk by generally transacting business and paying salaries in the functional currency of each of the major countries in which we do business, thus creating natural hedges.

41. Intercontinental Exchange, Inc. (12/31/2009, p. 91)

We may experience gains or losses from foreign currency transactions in the future given that there are still net assets or net liabilities and revenues and expenses of our U.S., U.K. and Canadian subsidiaries that are denominated in pounds sterling, euros or Canadian dollars. Our U.K. operations in some instances function as a natural hedge because we generally hold an equal amount of monetary assets and liabilities that are denominated in pounds sterling. Of our consolidated revenues, 6.5%, 3.3% and 1.2% were denominated in pounds sterling, euros or Canadian dollars for the years ended December 31, 2009, 2008 and 2007, respectively. Of our consolidated operating expenses, 22.3%, 20.2% and 15.9% were denominated in pounds sterling or Canadian dollars for the years ended December 31, 2009, 2008 and 2007, respectively. As the pound sterling, euro or Canadian dollar exchange rate changes, the U.S. equivalent of revenues and expenses denominated in foreign currencies changes accordingly. A 10% adverse change in the underlying foreign currency exchange rates would decrease annual pre-tax earnings by \$2.4 million, assuming no change in the composition of the foreign currency denominated assets, liabilities and payables.

42. Iron Mountain, Inc. (12/31/09, p. 56)

One strategy is to finance certain of our international subsidiaries with debt that is denominated in local currencies, thereby providing a natural hedge. . . . Another strategy we utilize is for IMI to borrow in foreign currencies to hedge our intercompany financing activities. . . . We have implemented these strategies for our foreign investments in the U.K., Continental Europe and Canada. Specifically, through our 150 million British pounds sterling denominated 7¹/₄% Senior Subordinated Notes due 2014 and our 255 million 6³/₄% Euro Senior Subordinated Notes due 2018, we effectively hedge most of our outstanding intercompany loans denominated in British pounds sterling and Euros. Canada Company has financed its capital needs through direct borrowings in Canadian dollars under the Credit Agreement and its 175 million CAD denominated 7¹/₂% Senior Subordinated Notes due 2017. This creates a tax efficient natural currency hedge. In the third quarter of 2007, we designated a portion of our 6³/₄% Euro Senior Subordinated Notes due 2018 issued by IMI as a hedge of net investment of certain of our Euro denominated subsidiaries.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

43. Johnson Controls, Inc. (9/30/2009, p. 41)

In order to maintain strict control and achieve the benefits of the Company's global diversification, foreign exchange exposures for each currency are netted internally so that only its net foreign exchange exposures are, as appropriate, hedged with financial instruments. The Company hedges 70% to 90% of the nominal amount of each of its known foreign exchange transactional exposures The Company selectively finances its foreign operations with local, non-U.S. dollar debt. In those instances, the foreign currency denominated debt serves as a natural hedge of the foreign operations' net asset positions. The Company has also entered into foreign currency denominated debt obligations to selectively hedge portions of its net investment in Japan. The currency effects of the debt obligations are reflected in the accumulated other comprehensive income account within shareholders' equity where they offset gains and losses recorded on the Company's net investment in Japan.

44. KIT digital, Inc. (12/31/2009, p. 28)

We currently do not hedge any of our foreign currency exposures and are therefore subject to the risk of exchange rate fluctuations. However, we attempt to employ a "natural hedge" by matching as much as possible in like currencies our customer revenues with associated customer delivery costs. We invoice our international customers primarily in U.S. dollars, British pounds, Australian dollars, Euros, Swedish kronor and Czech koruna.

45. Maxwell Technologies, Inc. (12/31/2009, p. 75)

As part of our risk management strategy, we use forward contracts to hedge certain foreign currency Maxwell uses forward contracts to hedge certain monetary assets and liabilities, primarily receivables and payables, denominated in a foreign currency. The change in fair value of these instruments represents a natural hedge as gains and losses offset the changes in the underlying fair value of the monetary assets and liabilities due to movements in currency exchange rates. These contracts generally expire in one month. These contracts are considered economic hedges and are not designated as hedges under the *Derivatives and Hedging Topic* of the FASB ASC, and therefore, the change in the instrument's fair value is recognized currently in earnings.

46. Mentor Graphics Corp. (1/31/2010, p. 58)

We are exposed to fluctuations in foreign currency exchange rates. To manage the volatility, we aggregate exposures on a consolidated basis to take advantage of natural offsets. The primary exposures that do not currently have natural offsets are the Japanese yen, where we are in a long position, and the euro and the British pound, where we are in a short position.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

47. Meridian Bioscience Corp. (9/30/2009, p.25)

Although foreign currency exchange rates had a negative effect on sales of our European Diagnostics operating segment, they had no significant effect on consolidated gross profit or consolidated operating income due to natural hedges. Our US Diagnostics operating segment markets and sells certain Meridian-branded diagnostic test kits that are sourced from European suppliers in Spain and Germany. These kits are purchased in Euros, which provides a natural hedge to gross profit and operating income on a consolidated basis.

48. Millipore Corp. (12/31/2009, p. 74)

Our earnings and cash flows are subject to fluctuations caused by changes in foreign currency exchange rates and changes in interest rates. We enter into foreign currency forward exchange contracts, when available on a cost-effective basis, to hedge our underlying foreign currency exchange rate exposures. These foreign currency forward instruments are managed on a consolidated basis to take advantage of natural offsets and to minimize our net foreign currency exposures.

49. Molex, Inc. (6/30/2009, p. 42)

We mitigate our foreign currency exchange rate risk principally through the establishment of local production facilities in the markets we serve. This creates a “natural hedge” since purchases and sales within a specific country are both denominated in the same currency and therefore no exposure exists to hedge with a foreign exchange forward or option contract (collectively, “foreign exchange contracts”). Natural hedges exist in most countries in which we operate, although the percentage of natural offsets, as compared with offsets that need to be hedged by foreign exchange contracts, will vary from country to country.

50. Movado Group, Inc. (1/31/2009, p. 49)

The majority of the Company’s purchases are denominated in Swiss francs. The Company reduces its exposure to the Swiss franc exchange rate risk through a hedging program. Under the hedging program, the Company manages most of its foreign currency exposures on a consolidated basis, which allows it to net certain exposures and take advantage of natural offsets.

51. Nike, Inc. (5/31/2009, p. 37)

Our foreign exchange risk management program is intended to minimize both the positive and negative effects of currency fluctuations on our reported consolidated results of operations, financial position and cash flowsWe manage global foreign exchange risk centrally on a portfolio basis, to manage those risks that are material to NIKE, Inc. on a consolidated basis. We manage these exposures by taking advantage of natural offsets and currency correlations that exist within the portfolio, and by hedging remaining material exposures, where practical, using derivative instruments such as forward contracts and options.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

52. Orient-Express Hotels, LTD (12/31/2009, p. 56)

Revenue of the Venice Simplon-Orient-Express, British Pullman, Northern Belle and Royal Scotsman tourist trains was primarily in British pounds sterling, but the operating costs of the Venice Simplon-Orient-Express were mainly denominated in euros. Revenue of the Copacabana Palace and Hotel das Cataratas in Brazil was recorded in U.S. dollars, but substantially all of the hotels' expenses were denominated in Brazilian reals. Revenue derived by Maroma Resort and Spa and La Samanna was recorded in U.S. dollars, but the majority of the hotels' expenses were denominated in Mexican pesos and European euros, respectively. Except for the specific instances described above, OEH's properties match foreign currency earnings and costs to provide a natural hedge against currency movements. The reporting of OEH's revenue and costs translated into U.S. dollars, however, can be materially affected by foreign exchange rate fluctuations from period to period.

53. Pall Corp. (7/31/2009, p. 9)

In fiscal year 2009, the Company derived 69% of sales from outside the U.S. Although sales and expenditures outside the U.S. are typically made in the local currencies of those countries providing a natural hedge against fluctuations in foreign currency rates, the company retains significant exposure to the value of foreign currencies relative to the U.S. dollar and operating results may be materially affected by changes in foreign currency rates.

54. PerkinElmer, Inc. (1/3/2010, p. 62)

Moreover, we are able to partially mitigate the impact that fluctuations in currencies have on our net income as a result of our manufacturing facilities located in countries outside the United States, material sourcing and other spending which occur in countries outside the United States, resulting in a natural hedge.

55. Pregis Holding II Corp. (12/31/2009, p. 48)

We have a natural hedge in our operations, as we typically produce, buy raw materials, and sell our products in the same currency. We are exposed to translational currency risk, however, in converting our operating results in Europe, the United Kingdom and to a lesser extent Egypt, Poland, the Czech Republic, Hungary, Bulgaria, Romania, Canada, and Mexico at the end of each reporting period.

56. RHI Entertainment, Inc. (12/31, 2009, p. 43)

The primary foreign currency exposures relate to adverse changes in the relationships of the U.S. Dollar to the British Pound, the Euro, the Canadian Dollar and the Australian Dollar. However, there is a natural hedge against foreign currency changes due to the fact that, while certain receipts for international sales may be denominated in a foreign currency certain production and distribution expenses are also denominated in foreign currencies, mitigating fluctuations to some extent depending on their relative magnitude.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

57. Rightnow Technologies, Inc. (12/31/2009, p. 45)

Expenses associated with international revenue are generally paid in local currency, which generally provides a natural hedge to offset the revenue impact. These expenses in the year ended December 31, 2009 were favorably impacted by \$3.5 million when comparing the change in weighted average exchange rates between the years ended December 31, 2008 and 2009.

58. ScanSource, Inc. (6/30/2009, p. 55)

The exposure to market risk for changes in foreign currency exchange rates arises from foreign currency denominated assets and liabilities, and transactions arising from non-functional currency financing or trading activities. The Company's objective is to preserve the economic value of non-functional currency denominated cash flows. The Company attempts to hedge transaction exposures with natural offsets to the fullest extent possible and, once these opportunities have been exhausted, through forward contracts or other hedging instruments with third parties.

59. Simon Property Group, L.P. (12/31/2009, p. 64)

We have also funded our European investments with Euro-denominated borrowings that act as a natural hedge against local currency fluctuations. This has also been the case with our Premium Outlet Centers in Japan and Mexico where we use Yen and Peso denominated financing, respectively We have also funded our European investments with Euro-denominated borrowings that act as a natural hedge against local currency fluctuations.

60. Skyterra Communications, Inc. (12/31/2009, p. 62)

During the normal course of business, the Company is exposed to market risks associated with fluctuations in foreign currency exchange rates, primarily the Canadian dollar and the Euro. To reduce the impact of these risks and to increase the predictability of cash flows, the Company uses natural offsets in receipts and disbursements within the applicable currency as the primary means of reducing the risk. When natural offsets are not sufficient, from time to time, the Company enters into certain derivative contracts to buy and sell foreign currencies

61. Snap-on, Inc. (12/31/2009, p. 82)

Foreign currency exchange risk exists to the extent that Snap-on has payment obligations or receipts denominated in currencies other than the functional currency, including intercompany loans to foreign subsidiaries denominated in foreign currencies. To manage these exposures, Snap-on identifies naturally offsetting positions and then purchases hedging instruments to protect the residual net exposures. Snap-on manages most of these exposures on a consolidated basis, which allows for netting of certain exposures to take advantage of natural offsets. Foreign exchange forward contracts are used to hedge the net exposures.

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

62. The L.S. Starrett Co. (6/27/2009, p. 16)

Effects of translation rate changes on cash primarily result from the movement of the U.S. dollar against the British Pound, the Euro and the Brazilian Real. The Company uses a limited number of forward contracts to hedge some of this activity and a natural hedge strategy of paying for foreign purchases in local currency when economically advantageous.

63. TRW Automotive Holdings Corp. (12/31/2009, p. 75)

We utilize derivative financial instruments to manage foreign currency exchange rate risks. Forward contracts, and to a lesser extent options, are utilized to protect our cash flow from adverse movements in exchange rates. Foreign currency exposures are reviewed monthly and any natural offsets are considered prior to entering into a derivative financial instrument.

64. Tupperware Brands Corp. (12/26/2009, pp. 9-10)

The Company derived 86 percent of its net sales from operations outside the United States in 2009. Because of this, movement in exchange rates may have a significant impact on the Company's earnings, cash flows and financial position. The Company's most significant exposures are to the euro and the Mexican peso, however the Company also has foreign exchange exposure in the South American, Asian, Australian, Russian and South African currencies, among others. Although this currency risk is partially mitigated by the natural hedge arising from the Company's local product sourcing in many markets, a strengthening U.S. dollar generally has a negative response to this fact, the Company continues to implement foreign currency hedging and risk management strategies to reduce the exposure to fluctuations in earnings associated with changes in foreign exchange rates. The Company generally does not seek to hedge the impact of currency fluctuations on the translated value of the sales, profit or cash flow generated by its operations.

65. United Surgical Partners International, Inc. (12/31/2009, p. 74)

We are exposed to risks associated with operating internationally, including foreign currency exchange risk and taxes and regulatory changes. Our United Kingdom facilities operate in a natural hedge to a large extent because both expenses and revenues are denominated in the local currency. Additionally, our borrowings in the United Kingdom are currently denominated in the local currency. Historically, the cash generated from our operations in the United Kingdom has been utilized within that country to finance development and acquisition activity as well as for repayment of debt denominated in the local currency. Accordingly, we have not generally utilized financial instruments to hedge our foreign currency exchange risk

Appendix 1: Sample Companies and Natural Hedge Disclosures (continued)

66. Visteon Corp. (12/31/2009, p. 120)

The Company's net cash inflows and outflows exposed to the risk of changes in foreign currency exchange rates arise from the sale of products in countries other than the manufacturing source, foreign currency denominated supplier payments, debt and other payables, subsidiary dividends and investments

in subsidiaries. Where possible, the Company utilizes derivative financial instruments, including forward and option contracts, to protect the Company's cash flow from changes in exchange rates. Foreign currency exposures are reviewed monthly and any natural offsets are considered prior to entering into a derivative financial instrument.

67. WABCO Holdings, Inc. (12/31/2009, pp. 41-42)

The economic conditions that we faced in 2009 resulted in geographic shifts and a significant reduction of income when compared to previous years. As a consequence, for full year 2009, all foreign currency exposures as noted above are moving in the same direction and as a result eliminated our natural hedge. However, looking at the trends in our currency risk patterns throughout the year, we believe that going forward we will again be in a position to benefit from a natural hedge.

68. Watts Water Technologies, Inc. (12/31/2009, p. 64)

On occasion, the Company may enter into a derivative instrument that does not qualify for hedge accounting because it is entered into to offset changes in the fair value of an underlying transaction which is required to be recognized in earnings (*natural hedge*).

69. Zebra Technologies Corp. (11/31/2009, p. F-31)

Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. Our objective is to preserve the economic value of non-functional currency denominated cash flows. We attempt to hedge transaction exposures with natural offsets to the fullest extent possible and, once these opportunities have been exhausted, through foreign exchange forward and option contracts with third parties.

70. Zimmer Holdings, Inc. (12/31/2009, p. 32)

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign currency exchange rates. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros, Swiss Francs, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won and Swedish Krona. We manage the foreign currency exposure centrally, on a combined basis, which allows us to net exposures and to take advantage of any natural offsets.