

**FOREIGN CURRENCY TRANSLATION
ACCOUNTING
AN APPLICATION OF STATEMENT 52**

MBA THESIS

**PINAR TOLUN
SEPTEMBER 1995**

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A THESIS
SUBMITTED TO THE FACULTY OF MANAGEMENT
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MASTER OF BUSINESS ADMINISTRATION

BY
PINAR TOLUN
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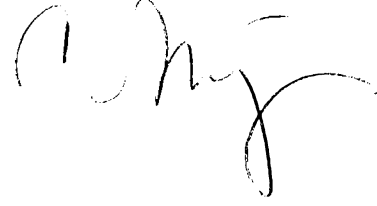
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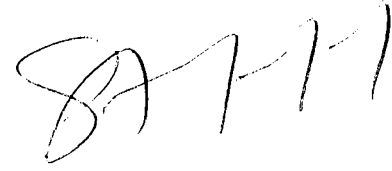
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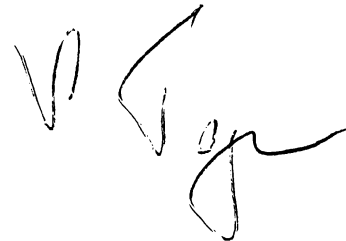
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ABSTRACT

FOREIGN CURRENCY TRANSLATION ACCOUNTING

AN APPLICATION OF STATEMENT 52

BY

PINAR TOLUN

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SEPTEMBER, 1995

This thesis presents an application of the Statement of Financial Accounting Standards No. 52, Foreign Currency Translation process on financial statements of an importing firm in Turkey. As it requires in the statement it is assumed that the DM is the functional currency of the firm and its functional currency is its reporting currency.

Temporal method of translation is applied in the remeasurement of financial statements. This method requires the use of both, historical and current rates depending on the characteristic of the accounts. All the translation gains and losses are taken into the income statement. However, the use of the temporal method of translation has changed the initial relationship among the accounts. The effect of the foreign currency translation on financial statements is analyzed and some recommendations are made.

ÖZET

YABANCI PARA BİRİMİ CİNSİNDEN YAPILAN İŞLEMLER MUHASEBESİ FINANSAL MUHASEBE STANDARTI NO. 52 UYGULAMASI

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EYLÜL, 1995

Bu tez, Finansal Muhasebe Standartı No. 52' ye bağlı döviz çeviri yöntemini ithalatçı bir şirketin mali tablolarına uygulayan bir çalışmadır. Standartta önerildiği üzere, firmanın faaliyet gösterdiği ve finansal raporlarını hazırladığı para biriminin Alman Markı olduğu kabul edilmiştir.

Mali tabloların çevirisinde “zaman faktörüne dayalı yöntem” olarak bilinen metod kullanılmıştır. Bu metod, çevirilerde hesapların özelliklerine göre hem cari oranın hem de hesaba ait işlemlerin yapıldığı zamanda geçerli olan döviz kurunun birlikte kullanılmasını zorunlu kılar. Çeviri işleminden doğan bütün kar ve zararlar gelir tablosunda gösterilirler. Bununla birlikte, bu metod, tablolarda hesaplar arasındaki matematiksel oranı değiştirmiştir. Döviz çevirisinin finansal tablolar üzerindeki etkisi incelenmiş ve bazı öneriler getirilmiştir.

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I gratefully acknowledge patient supervision and helpful comments of Can Şimga MUĞAN, throughout the preparation of this study. I would also like to express my thankfulness to members of S. A.Ş. who have contributed to the progress of this study. Finally, I owe a special debt of thanks to my family and my husband Bora Baysal for their understanding, support and patience through all the study.

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1. INTRODUCTION

1.1 PURPOSE OF THE THESIS

The increasing number of multinational operations and globalization movements has lead many countries and international associations in the world to search some accounting standards. The aim of this struggles has been to facilitate the economical activities and create a common accounting language between the countries.

On the way of being a member of European Community, Turkey also is in the readiness of adoptation of an international accounting standard. In the recent years too many new accounting principles have been accepted by different Laws and Communiqués.

Foreign currency translation accounting has been one of the leading subjects of International Accounting. It is widely practiced more than 55 countries of the world although conceptual distinctions exist between methods (Fitzgerald, Stickler, and Watts, International Survey, 1992).

In Turkey, there is not any suggestion brought up by an association and no standard developed on foreign currency translation accounting. Foreign currency translation is applied by independent audit firms under the request of companies. However, treatment of importing and exporting

firms to transaction gains and losses resulted from the change in the rate of foreign currency, has been regulated by some authorities.

This thesis shows new balances under severe currency devaluation and sharp fluctuations in 1994 on translated financial statements according to the rules of FAS 52. It is also organized as a guide to accommodate to the interest of those that may have need to know one of the approaching new application of accounting in Turkey.

1.2. OUTLINE OF THE THESIS

The thesis is consist of two main sections. The first section that covers chapters 2, 3, 4 is an overview which is found useful to understand the discussions and the concept. Chapter 2, introduces the subject, translation methods and finally gives the definition of the problem. Chapter 3, is briefly presenting the recent developments and discussions on the foreign translation accounting. Chapter 4, takes the subject up with changing prices as it is difficult to separate the issue of foreign currency translation from the issue of inflation when accounting for foreign operations.

The second section contains an application of FAS 52 to financial statements of an importing company. Exhibit 1 and Exhibit 2 are prepared to facilitate the understanding of the system of the translation process. Implementation details of the process is given within the notes

and the footnotes. It is also in that chapter that original and remeasured financial statements are compared and interpreted in terms of change in their financial ratios. In the conclusion, an overall evaluation of the firm and recommendations are presented.

2. FOREIGN CURRENCY TRANSLATION ACCOUNTING

2.1. REASONS FOR TRANSLATION

One reason for translation is recording foreign currency transactions. Financial statements cannot be prepared from accounts that are expressed in various currencies. A company whose exports or imports are invoiced in terms of foreign currency unit, must translate those amounts to their domestic currency equivalents before entering the transactions in its books of account.

Branch and subsidiary activities are another reason for translation. Branch activities are normally quite closely planned, administrated, and controlled by the parent organization. Since both branch and parent are integral parts of one whole, it makes little sense to view the accounts of either themselves. They must be combined so that a fair and complete total financial picture comes about. In contrast to branch activities, subsidiary companies enjoy a greater degree of autonomy by virtue of their separate legal existence. Nevertheless, foreign currency translation procedures are required.

Parent company consolidation requirements are often in effect for subsidiary companies. In addition, parent companies must continually monitor the performance of foreign subsidiary operations and thus need accounting information that allows inter-country comparisons between

subsidiaries' result as well as with those of the parent. Also, planning and administrative functions of parent company management cannot be performed effectively unless accounting information has substantially the same basis as that of parent.

The other reason is that the expended scale of international investment activities increases the need to convey accounting information about an independent company domiciled in one country to readers in another. This occurs, for example when a company wishes to have its shares listed on a foreign stock exchange, contemplates a foreign acquisition or joint-venture arrangements, or simply desires to communicate the results of its operating performance and financial position to its foreign stockholders.

2.2. TRANSLATION METHODS

In the process of translation, all local currency balance sheet and income statements accounts are restated in terms of reporting currency by multiplying the local currency amount times the appropriate exchange rate. The four major ways that have been used over the years in the translation process are described here.

2.2.1. Current Rate Method

The current rate method is the easiest to apply because it requires that all assets and liabilities be translated at the current exchange rate. This method results in translated statements that retain the same ratios and relationship that exist in the local currency. Only net worth would not be translated at the current rate. Income statement items are generally translated at exchange rates prevailing when these items are recognized. For purposes of expediency, however, these items are typically translated by an appropriately weighted average of current exchange rates for the period (Arpan & Radebaugh, 1985).

The current rate method errs by presuming that their fluctuating domestic rates are caused by fluctuating current translation rates. This is seldom the case as inventory and fixed asset values are generally supported by local inflation. Indeed, translated asset values make little sense in the absence of local price adjustments prior to translation. In addition, translation of a historical cost number by a current market-determined exchange rate produces a result that resembles neither historical cost nor current market value (Choi & Mueller, 1992).

Another problem with current rate method is that translating all foreign currency balances by the current rate gives rise to translation gains and losses every time exchange rates change. Reflection of such exchange adjustments in current income could significantly distort reported measures

of performance. Many of these gains and losses may never be fully realized, as exchange rates often reverse their direction before realization takes place.

2.2.2. Current-Noncurrent Method

Under this method current assets and liabilities are translated at current exchange rates and noncurrent assets and liabilities and stockholders' equity are translated at historical exchange rates. Income statement items, with the exception of depreciation and amortization charges, are translated at average rates applicable to each month of operation or on the basis of weighted averages covering the whole period to be reported. Depreciation and amortization charges are translated at the historical rates in effect when the related assets were acquired.

This methodology, unfortunately, suffers from a number of shortcomings. For example, it lacks adequate conceptual justification. Present definitions of current and noncurrent assets and liabilities do not explain why such a classification scheme should determine which rate to use in the translation process (Choi & Mueller, 1992).

Furthermore, fluctuating exchange rates may produce translations that distort operating results between accounting periods. Use of the year-end rate to translate current assets implies that foreign currency cash, receivables, and inventories are equally exposed to exchange risk

regardless of their form. Yet, in those instances where local price increases are possible following devaluation, inventory values are protected from currency erosion (Choi & Mueller, 1992).

2.2.3. Monetary-Nonmonetary Method

Under this method, monetary assets and liabilities -cash, receivables, and payables, including long-term debt- are translated in the current rate. Nonmonetary items, -fixed asset, long-term investments and inventories- are translated at the historical rate. Income statements items are translated under procedures similar to those described for the current-noncurrent framework. In contrast to the current-noncurrent method, this translation option relates exchange rate risk to the composition of a firm's current assets. It also reflects change in the domestic currency equivalent of long-term debt in the period in which they occur, producing what many consider to be more timely indicates of exchange rates effects.

However, this method like current-noncurrent method, relies on a classification scheme to determine appropriate translation rates. Since translation is concerned with measurement and not with classification, the characteristics of assets and liabilities that determine their financial statement classification are not necessarily relevant for selecting appropriate translation rates (Choi & Mueller, 1992).

This translation method also masks inventory risk whenever local pricing adjustments following a currency devaluation are constrained by government price controls or local competitive. Because, translation of inventories at the historical rate preserves a dollar value in the consolidated results that may actually been impaired (Choi & Mueller, 1992).

Another perceived distortion arises under the monetary-nonmonetary method from matching sales at current prices and translation rates against cost of sales measured at historical cost and translation rates. Exchange rate changes in this regard often result in distorted profit margins owing to the lag in inventory turnover rates (Choi & Mueller, 1992).

2.2.4. Temporal Method

According to the temporal approach, currency translation is a measurement conversion process. As such, it can not be used to change the attribute of an item measured; it can only change the unit of measure. Translation of foreign balances, for example, restates the currency domination of these inventories but not their actual valuation (Choi & Mueller, 1992).

According to the temporal method, cash, receivables, both current and noncurrent payables are translated at the current rate. Other assets and liabilities may be translated at the current or historical rates, depending

on their characteristic. Assets and liabilities carried at past exchange prices are translated at historical rates (SFAS No 8).

For example, a fixed asset carried at the local currency price at which it was purchased would be translated into the reporting currency at the exchange rate in effect when the asset was purchased. Asset and liabilities carried at current purchase or sales exchange prices or future exchange prices would be translated at current rates. For example, inventory carried at market would be translated at the current rather than historical rate. Revenue and expense items are translated at rates that prevailed when the underlying transactions took place, although average rates are suggested when revenue or expense transactions are voluminous (Lorenson, 1972).

When nonmonetary items abroad are valued at historical cost, the translation procedures resulting from the temporal method are virtually identical to those produced by the monetary-nonmonetary method. The two translation methods differ only if other asset valuation bases are employed, such as replacement cost, market values, or discounted cash flows (Choi & Mueller, 1992).

Being a more general case of the monetary-nonmonetary method, this translation approach shares most of the advantages and disadvantages of the former. In deliberately ignoring local inflation as part of the

translation process, this method shares a limitation common to all translation methods discussed above.

2.3. TRANSLATION GAINS AND LOSSES

All the translation methods, offer a wide array of accounting results because of the fluctuation of the exchange rates over time. The degree of this array differs from one method to another and it is measured by translation exposure. Foreign exchange exposure exists whenever a change in foreign exchange rates alters the value of a firm's net assets, earnings and cash flows. Accordingly, translation exposure is measured by taking the difference between a firm's exposed foreign currency assets and liabilities.

The balance sheet of a company, appears in the first column in TL in Appendix 1. The second column depicts the DM equivalents of the TL balances when the exchange rate was 1 DM = 24,974 TL on 2/1/1995. On 26/1/95, TL depreciated by 22.3% leading different accounting results under different translation methods.

Under the current rate method, the exchange rate changes affect the DM equivalents of the company's total foreign currency assets and liabilities in the current period. Since their DM values are affected by changes in current rate they are said to be exposed to foreign exchange risk.

Under this method TL depreciation in value would result in a translation loss by DM 4,362 since total assets are greater than total liabilities.

Under the current-noncurrent method, the company's accounting exposure is measured by its TL net current asset or liability position (a positive TL 7,686,487). Exposure under the monetary-nonmonetary method, in turn, is a negative 14,617,881 which produce a translation gain of DM 6,555. Exposure under the temporal principle depends on whether the company's inventories or other nonmonetary assets are valued at historical cost or current cost. Although in the case study inventories are valued at historical cost, in order to demonstrate the difference between temporal and monetary-nonmonetary method, it is assumed that inventories are carried at current cost.

As a result, Appendix 1 and Appendix 2 illustrate the different translation methods that offer a wide array of accounting results, ranging from a DM 4,362 loss under current rate method to a DM 6,555 gain under the monetary-nonmonetary method. As it is seen on Table 2, recognition of these translation gains and losses immediately in the income statement may lead to very different pictures under different translation methods as well. Operations reporting considerable profits before currency translation may vary well end up reporting losses or significantly reduced earnings after translation and conversely. Hence, international accounting treatments to these "translation gains and losses" are as diverse as translation procedures.

One of the oppositions to inclusions of translation adjustments in current income bases on the fact that these gains and losses are unrealized and that inclusion of such adjustments in current income would, therefore, be misleading. Under these conditions, translation adjustments should be accumulated separately as a part of shareholders' equity in the balance sheet (Parkinson, 1972). However, also this option is criticized from the point of view that with this treatment financial statement would give the impression that rates are stable despite their fluctuation (SFAS No. 8).

Another idea is deferring the translation gains or losses and amortizing these adjustments over the life of related balance sheet items. Since fixed assets are generally translated at historical rate, depreciation of TL relative to the DM would produce translation loss. This translation loss would be treated as part of the asset's cost and amortized to expense over the asset's useful life.

According to Lorenson, a change in DM value of nonmonetary liabilities is offset against a change in DM value of nonmonetary assets. According to generally accepted accounting principles, these value changes in nonmonetary assets are not recognized. If they are recognized, then changes in DM value of net monetary liabilities also should be recognized. Accomplishing the offsetting by not recognizing changes in the DM value of either item introduces an aberration into accounting for

foreign operations that no accountant would tolerate for domestic operations (Lorenson, 1972).

The third option as it is illustrated above, is to recognize them in the income statement immediately. However, as it is stated, in this case changing exchange rates will lead to serious fluctuations in reporting income. The multinational companies, to protect themselves against the financial statements effect of currency swings, may engage in protective maneuvers referred to as hedging strategies. The company employing the current-noncurrent currency translation method in Appendix 1, might instruct its financial manager to increase his local currency borrowings by TL 7,686,487. This action would increase exposed liabilities by an amount what would just offset its exposed assets, thus reducing its accounting exposure to zero.

2.4. FOREIGN CURRENCY TRANSACTIONS

A foreign currency transaction is transaction that is dominated in a currency other than the functional currency of an entity. Foreign currency transactions arise when an enterprise:

- a) buys or sells on credit goods or services whose prices are denominated in foreign currency
- b) borrows or lends funds and the amounts payable or receivable are denominated in foreign currency
- c) is a party to an unperformed forward exchange contract or

d) for other reasons, acquires or disposes of assets, or incurs or settles liabilities denominated in foreign currency (FAS No: 52).

The functional currency of a Turkish firm operating in Turkey, is Turkish Lira. No accounting problem arises as long as the transactions are denominated in the firm's functional currency. However, when it is denominated in a foreign currency, the firm needs to resolve four accounting problems:

- 1) The initial recording of the transaction
- 2) the recording of foreign currency balances at subsequent balance sheet dates
- 3) the treatment of any foreign exchange gains and losses, and
- 4) the recording of the settlement of foreign currency receivables and payables when they come due (Arpan & Radebaugh, 1985).

How these four issues are resolved depends on the perspective the firm chooses. The firm has two options. Under the one-transaction perspective, the transaction is not considered complete until the cash needed to liquidate the receivable or payable has actually been exchanged. Any gain or loss that arises from the transaction is considered an adjustment to the cost of the import or the revenue from the export. The result of the one-transaction perspective is that the impact of an exchange rate is not recognized until the equipment is written off, and the gain or loss is treated as part of depreciation expense instead of as a separate financial item (Arpan & Radebaugh, 1985).

The two-transaction perspective treats foreign currency receivables and payables as separate from the sale or purchase that gave rise to them. Thus, the foreign exchange gain or loss that arises from translating the receivable or payable at the current exchange rate is not used to adjust the revenue from the export or the cost of the import.

Under the two-transaction perspective, the foreign exchange gain or loss could be handled in one of two ways. One possibility is to defer the gain or loss until it is actually realized when the payable or receivable is liquidated. The other possibility is to take the gain or loss directly to the income statement in the period incurred (Arpan & Radebaugh, 1985).

After all different applications of exchange adjustments stated above, the major problems in the area of accounting for foreign currency translation are summarized as follows:

- 1) Which exchange rate should be used to translate foreign currency balances to domestic currency?
- 2) How should the gains and losses from transactions and translation be accounted for?

Because transaction gains and losses are settled transactions, the accountants generally agreed that these gains or losses should be reflected immediately in the income statement. However, translation adjustments are

usually thought as "unrealized" and the treatment to these gains and losses has usually been a subject of translation accounting debates.

3. HISTORICAL DEVELOPMENT OF TRANSLATION STANDARDS

3.1. TRANSLATION DEBATES IN USA

Prior to 1965, the translation practices of many US companies were guided by Accounting Research Bulletin No: 4 (ARB No.4), subsequently reissued as ARB No. 43. This pronouncement advocated use of the current-noncurrent method described earlier. Transaction gains and losses were to be taken directly to income. Within the decade, ARB No 43 permitted certain exceptions to the current-noncurrent methodology. This, brought diversity of treatment to translation process which finally ended by FAS No. 8 issued in 1975 by Foreign Accounting Standards Board.

This pronouncement provided all the US companies the conformity with US generally accepted accounting principles (GAAP) and a standard for translation accounting. Statement 8, was mandating the use of temporal method which was supporting the historical cost idea for the items such as fixed assets, cost of good sold, depreciation expense, inventories etc. Another important feature is that, Statement 8 required that all foreign exchange transactions and translations gains and losses be taken directly to income statement.

Many firms complained about carrying inventory at historical rates in dollars for two reasons. The first reason was simply cost benefit. The feeling was that inventory was turning over more faster than change in

foreign currency, and that it would be more easy to compute inventories with current rates rather than historical ones (Arpan & Radebaugh,1985).

The other reason was one of timing. Managers complained that because inventory was being translated at the historical rate, it was possible for an exchange rate change in one quarter to impact on earnings in a subsequent quarter when inventory flowed through the cost of good sold (Arpan & Radebaugh, 1985). Thus, under FAS 8, exchange rate movements resulted in reporting increasing or decreasing operating margins solely because of the lag in inventory turns.

Another concern with the FAS 8 approach arose from the requirement that all translation gains and losses be included currently in income. Although exchange rate movements are frequently short term in nature, at any reporting date the measured gain or loss may be significant. Because such gains and losses are unrealized and frequently short term in nature, some believe that reflecting them in income tends to obscure long-term trends which are more relevant in predicting profitability of the enterprise and return of capital (Price Waterhouse, 1982).

As a result of these and other criticisms, the Board decided to reconsider the pronouncement. In February 1979, a task force containing the representatives of the IASC (International Accounting Standards Committee) as well as the professional standard-setting bodies in the United Kingdom and Canada was appointed to advise the board. After

numerous public meetings and two exposure drafts, in December 1981 the FASB issued Statement of Financial Accounting Standards No 52.

3.2. KEY CONCEPTS OF FAS 52

3.2.1. Determination of Functional Currency

Determination of the functional currency is a key feature of FAS No. 52, as it determines the choice of translation method and disposition of exchange gains and losses. The functional currency approach presumes the followings:

- * An enterprise may operate and generate cash flows in a number of separate economic environments,
- * Each of the enterprise's operations can be identified as operating in one primary economic environment, generally either the local environment or the parent company's environment. The currency of that primary economic environment is the functional currency for those operations.
- * The enterprise may commit to a long-term position in a specific economic environment and does not currently intend to liquidate that position (Price Waterhouse, 1982).

According to these definitions, most companies probably will consider each foreign country in which they do business as the primary economic environment for operations in that country. If so, the functional currency for the company's operations in that country probably will be the local currency of the foreign country (FAS No. 52).

However, if the separate economic environment is highly inflationary or the company's investment position is not long term, in this case the company must determine what currency other than the local currency is the functional currency of the foreign operation. For example, where there is a high degree of integration with the parent company's operations, the functional currency may be that of the parent company's environment (FAS No. 52).

3.2.2. Translation process

Financial Accounting Standard Board defines the translation process in Statement 52 as "the process of expressing in the reporting currency of the enterprise those amounts that are denominated or measured in a different currency".

The actual translation process depends on which currency the books and records of the foreign entity are kept in. Once those decisions have taken place, the translation process involves either the current rate method or the temporal method.

Appendix 3 exhibits the differences between translation process depending on the definition of the functional currency. The books and records of the foreign entity can be kept in either the local currency or the reporting currency of the parent company which is dollar in this example. If the books and records are kept in dollars and the functional currency is defined as the dollar, no translation process is necessary.

If the books and records of the foreign entity are kept in the local currency, the translation process depends on the definition of the functional currency. If the functional currency is the local currency, the financial statements are translated into US dollars using the current rate method. Translation gains or losses arising therefrom are disclosed in a separate component of shareholders equity. This preserves the financial statement ratios as measured in the local currency statements.

However, if the US dollar is determined to be the functional currency, a foreign entity's financial statements are "remeasured" to a dollar using temporal method. Here all translation gains and losses arising from the translation process are included in determining current income.

Another possibility, although a very rare one, is that the books and records be kept in the local currency but the functional currency is a third currency. In this situation, the financial statements need to be

remeasured from the local currency to then functional currency using the temporal method and then translated into dollars using current rate method. The rationale behind the concept of remeasurement is to produce the same results as if the transactions had actually taken place in the functional currency. Thus, nonmonetary assets are restated in the functional currency as the exchange rate in effect when they were acquired in the local currency (Arpan & Radebaugh, 1985).

3.3. INTERNATIONAL RESPONSE

United Kingdom

Currency translation practices in the United Kingdom are guided by Statement of Standard Accounting Practice No. 20. Issued in April 1983. SSAP 20 resembles FAS No. 52 in most major respects. For purposes of translation, foreign operations are divided into those that operate as separate or quasi-independent entities versus those that are direct extensions of the parent company.

The temporal method of currency translation is prescribed for dependent operations. Translation gains and losses are reflected in current income. The current rate method is employed for subsidiaries viewed as largely independent of the parent and translation gains or losses are recorded as adjustments to balance sheets reserves (Arpan & Radebaugh, 1985).

International Accounting Standards Committee

The recent accounting standardization efforts at the international level was IAS 21 issued by the forty-six-nation member International Accounting Standards Committee, headquartered in London. Its aim was harmonizing accounting and reporting standards. In this regard, IAS 21 mirrors to a large extent the foreign currency translation provisions embodied in US FAS No. 52 as well as UK SSAP No. 20.

Specifically, foreign currency transactions entered into by a company should be translated to their domestic equivalents using the exchange rate ruling on the date at which the transaction occurred. At the balance sheet day, monetary assets and liabilities denominated in foreign currencies should be converted at the exchange rate ruling on that date or at the exchange rate effective in forward exchange contracts. Gains and losses arising from these transactions, with a few exceptions, should be included in current income.

The current or closing rate translation method is required for foreign operations that are not considered integral to the operations of the parent; the temporal method is recommended for those that are. Under temporal method, gains and losses are to be reflected in current income except that :

a) gains and losses relating long-term monetary items may be deferred and amortized over the remaining lives of the monetary items,

b) gains or losses arising from severe devaluations may be offset against the carrying value of the assets concerned, provided that the adjusted value of the assets does not exceed the lower of replacement cost and the amount recoverable from the use or eventual sale of the assets. These exemptions are not permitted by US FAS No. 52 or UK SSAP No. 20

3.4. THE LEGAL REGULATIONS IN TURKEY CONCERNING THE ACCOUNTING OF FOREIGN CURRENCY TRANSACTIONS

In Turkey, no standard has been determined for foreign currency translation accounting. However, treatment of gains and losses resulting from transactions has been regulated by different laws, communiqués and articles announced by related authorities. Different regulations exist concerning import, export and the subject of the transaction. Import of fixed asset, regulated by the General Communiqués in the Procedural Taxation Law, Turkish Commercial Law, and by other communiqués issued by Capital Market Law. Here, it is mostly focused on import of raw materials and commercial goods in order to frame the interest area.

Procedural Taxation Law

The basic criteria for foreign exchange gains and losses is where the transaction is reflected. If the transaction is reflected in income statement, the differences in exchange rates will also be reflected in income statement, otherwise they will take place in the balance sheet.

Unless the cost of the imported good is not stated in the income statement, gains or losses provided from these transactions should be added to the cost of that good (Kazım Yılmaz, 1993).

For the transaction loss resulted from barter, forward letter of credit or credit payment acceptance, if the raw material, products and goods are still had in stock and unsold, the "single transaction method" should be implemented, and for the ones that are sold " dual transaction method " will be implemented (Ataman & Sumer, 1993). Transaction methods have already been introduced in Page 15.

In order for the transaction gains caused by foreign currency debt to be reflected in the cost of the asset, this condition should be present: The asset acquired through foreign exchange debt should be reflected in the organization and accounts. Otherwise, the total value correction cannot be considered as an increase in the asset's value. Yet, can be recorded as a loss when the raw material acquired in foreign currency is utilized or sold, or when the fixed asset is fully depreciated (Durmuş, 1979).

Turkish Commercial Law

Turkish Commercial Law suggests that when there is a decrease in exchange rates "single transaction" method is employed to reduce the value of relevant imported goods instead of giving way to possible reduction in foreign exchange debts.

On the contrary, when there is an increase in exchange rates "dual transaction method" is implemented. This method does not have an impact on the value of assets. It reflects the loss in the income statement. The important point here, is to employ the same method for similar transactions during all periods. The method to be used is determined according to the economic conjuncture (Şensoy, 1994).

Briefly, Turkish Commercial Law does not impose a specific method for transactions. The method, can be determined through preference.

Accounting system determined by Ministry of Finance

In import which requires foreign currency payments, in case "two transaction method is adapted, these currency gains and losses in the income statements, should be followed under the account of "Ordinary gains and losses from other operations" (Şensoy, 1994).

4. FOREIGN CURRENCY TRANSLATION WITH CHANGING PRICES

4.1. CHANGES IN THE GENERAL PURCHASING POWER OF MONEY

The general purchasing power of money varies from time to time as a result of various specific or general forces. Changes in the general purchasing power of money are known as inflation or deflation. Under inflation the general purchasing power of money declines as the general level of prices of goods and services rises. The general purchasing power of money and the general price level are reciprocally linked.

In most countries, primary financial statements are prepared on the historical cost basis of accounting without regard either to changes in the general level of prices or to increases in specific prices of assets held, except to the extent that property, plant and equipment and investment may be revalued. Consequently, in such financial statements, the individual assets, liabilities, shareholder's equity, revenue, expenses and gain and loss items are stated in terms of the purchasing power of money at the time at which these items originated. This affects the comparability of financial statements with those of prior periods, and does not reflect the real financial position of the company at the balance sheet date.

In a hyperinflationary economy, financial statements are useful only if they are expressed in terms of the measuring unit current at the balance sheet date (Price Waterhouse Turkey, 1990).

4.2. FOREIGN CURRENCY TRANSLATION WITH CHANGING PRICES

Statement 33 was the standard in the US which has been issued in 1979, that deals with accounting for changing prices. However, it did not deal with the inflation in foreign operations.

Inflation treatment in Statement 52 has only been stated as “The financial statements of a foreign entity in a highly inflationary economy shall be remeasured as if the functional currency were the reporting currency. Accordingly, the financial statements of those entities shall be remeasured into the reporting currency according to the definition of functional currency. For the purposes of this requirement, a highly inflationary economy is one that has cumulative inflation of approximately 100 percent or more over a 3 year period. (FAS No: 52)

Before the issuance of Statement 70, two major methods of accounting for inflation in a foreign country were discussed:

- 1) The translate / restate method. This method recommended translating foreign currency financial statement into dollar end then adjusting them for inflation in the US.

2) The restate / translate method. This method recommended that one restate the foreign currency financial statements for inflation in the foreign country and translate the adjusted statements into dollar.

Although Statement 52 had removed most of the problems in the translation process, the Foreign Accounting Standards Board, issued Statement 70, in order to bridge the gap between accounting for changing prices (Statement 33) and accounting for foreign currency (Statement 52).

The main provisions of SFAS 70 were as follows:

1. If an enterprise uses the US dollar as its functional currency, it has to use temporal method of foreign currency translation and then should restate these for inflation in the country of its foreign partner.

2. If an enterprise uses a currency other than the US dollar as its functional currency, it should use the current rate method of foreign currency translation and then:
 - a) the relevant items in its overseas accounts should be restated in current cost terms before translation from the overseas country's currency to the US dollar.

 - b) the effects of general inflation on the current cost information should be calculated either

- i) after translation using the US consumer price index, or
- ii) before translation using the relevant overseas country's general price index.

In general, therefore in the US the position is as follows:

Foreign currency translation method	Price changes to be used	Method of combining translation and price level adjustment
Temporal	US	Translate/restate
Closing	Overseas	Restate/translate

(C.A. Westwick, 1989)

5. AN APPLICATION

5.1. METHODOLOGY

This chapter, presents the application of the FAS 52 translation process on financial statements of an importing firm in Turkey. It is assumed that both functional currency and reporting currency of the firm are DM as it is the requirement of the Statement for inflationary countries. Temporal method of translation is implemented in the remeasurement of financial statements. This method requires the use of both, historical and current rates depending on the characteristic of the accounts. All the translation gains and losses are taken into the income statement. The remeasurement is assumed to be prepared on January 1, 1995 as a request of company's German partner.

In Turkey, although there is not perfect inverse relationship between the local inflation rate and TL's external rate, inflation directly impacts exchange rates. Especially, 1994 period has been one of the example of the fact that high inflation rate was followed by high foreign currency rates. In these conditions, restating the statements for the local inflation and then translating would be penalizing the company twice as all the gains and losses from both processes should be reflected in the income statement.

However, the application is presented as one of the two steps of translate-restate method which is also in accordance with Statement 70. The restatement step is supposed to be done by German partner of the firm for the inflation in Germany.

The company is one of the two firms managed by a family. The one on financial statements of which it is worked, is a production firm. It imports one construction material; laminate, and sell it to the second firm after pressing the material under high pressure to the chipboards. It is the second firm that market these products to outside customers in variety of forms according to their needs.

5.2. DESCRIPTION OF WORKSHEETS

There has been some difficulties in collecting the data; for example it was impossible to calculate unit cost of the products because cost of good sold was being calculated only with the help of ending and beginning inventories. Thus, translation is made in the same way assuming historical cost for inventories is being used (Note 2). Again, for some items of the raw material inventory such as timber, secondary materials and packaging materials ageing data was not obtainable. Raw material inventories are translated by historical rates and necessary assumptions are stated in Note 2.a. Monthly break down of all the expenses are presented in 2.b

In Note 3, restated and translated balances are presented with necessary steps to be taken for the process. Because the firm is only responsible for production activities, all the cost of depreciation is allocated to production cost. Other depreciation charges are reflected on the financial statements of marketing firm.

Note 4, presents the sales during the year 1994 translated by the historical rates in effect when the sales are realized. Although in Statement 52, sales are advised to be translated by monthly average rates, daily closing rates are used as it would give more accurate results if they are reachable.

Remeasured balance sheet is formed only after all accounts are translated. As required by FAS 52, all deferred tax credits in the opening balance sheet were remeasured using current exchange rates. The effect of that change has been reflected in opening retained earnings.

Ending retained earning is a plug figure which is derived by total assets and total liabilities & shareholder's equity equality. Finally, income statement is formed bringing out a foreign loss which is also a plug figure that is derived by the sum. The important thing to note here is that the translation loss is taken directly to income statement as a requirement of FAS 52. This aggregate exchange loss figure combines both transaction and translation losses.

5.3. COMPUTATION OF FINDINGS AND FINANCIAL RATIOS

As it is seen on Exhibit 3, the translation under temporal method does not result in translated statements that the same ratios and relationships that exist in the local currency.

One of the reason for this differentiation is that different currency rates are used for different accounts. Ratios derived solely from current assets, long-term liabilities and short-term liabilities, such as current ratio, quick ratio, debt ratios will differ less from financial ratios computed from translated DM amounts because most of these accounts are translated by the current rate.

The other reason, however, is that although since 1976, the cumulative inflation rate over three years has exceeded 100%, application of inflation accounting for statutory purposes is not mandatory in Turkey. It is only limited with the revaluation of fixed assets, which as performed according to indices determined by the Ministry of Finance, and the revaluation of investments through issuing pro-rata shares from the capital increase and through the use of the revaluation fund of financial assets. The revaluation indices do not necessarily reflect inflation. However, the absence of inflation accounting leads companies to announce overstated incomes as in the case.

As it is previously stated, a foreign currency asset or liability is said to be exposed to exchange rate risk if a change in the exchange rate causes the company's foreign currency equivalent to change.

Though, foreign currency balance sheets items exposed to exchange rate risk are those items that are translated at current as opposed to historical exchange rates. In the case, because the functional currency is reporting currency, the translation exposure is calculated only from accounts translated by current exchange rate (essentially monetary assets and liabilities). A firm experiences a negative exposure because exposed liabilities exceed exposed assets. In this instance, revaluation of the DM give rise to a translation loss.

Accordingly, in negative exposure position, retained earnings are the amounts that provide new total assets and liabilities equality. The reason for the negative retained earnings in translated balance sheet is that the company has not increased its capital since it started to its operations. Translation of this item by the historical currency rate results with a greater amount of paid in capital figure in DM (paid in capital's share within the shareholder's equity increases from 0.15 to 2.95) which is offset by a negative retained earnings.

Relatively small change occurs in the financial structure ratios as total liabilities decreases only by %4 where as shareholders' equity increases by the same amount within the total liabilities. Yet, the firm is

operating with an insufficient capital. When appreciation in fixed assets is eliminated debt-equity ratio increase up to 74% which is considered quite risky in an unstable economic environment. This situation worsen in translated balance sheet as firm looks almost operating without any capital.

Exchange adjustments which are essentially plugged into the income statement have two dimensions, translation and transaction gains and losses. It is possible to derive translation gains and losses more specifically to ascertain the effect of the change on financial statements.

One of the components of the translation adjustment is the beginning change in net monetary asset position which is found by multiplying the beginning net monetary asset position by the change in the current rate during the year. It results with the loss in beginning net monetary assets with the exchange rate increasing from 8,386 to 24,376:

$$(461,811,504 \text{ TL} - 1,476,135,468 \text{ TL}) / 15,990 = -63,434 \text{ DM}$$

Another component of the translation adjustment is the addition to net liability position from operations in 1994. It is found by dividing the difference of the beginning and ending net liability positions to the currency rate increase from 8,386 to 24,376.

$$(-1,014,323,964 \text{ TL} + (-1,626,000,806 \text{ TL})) / 15,990 = -38,253 \text{ DM}$$

However, deriving transaction gains and losses is more complex and is not very easy. Because transaction gains and losses would result from purchase and sale of imported raw material (laminated), the computation of detailed exposure is possible only if unit cost and sale prices are available. On the other hand, working again backwards from the equality “Beginning net monetary exposure + net monetary exposure from operations + transaction gains and losses = Net accounting exposure” it is possible to have an idea about the size of the exposure. This equality brings about a transaction gain of DM 106,306.

The firm’s net income of TL 480,950,788 in TL based income statement, turns to DM 46,144 loss in translated statement. The reason for that lies in the management policy of the company. As it is previously stated, the main customer of the firm is again the marketing company of the same family. Because there is a tendency for profit minimization, an increase in cost of laminated due to an increase in the foreign currency is not totally reflected in cumulative TL sale prices of the products (Note 4). Accordingly, remeasurement of sales by higher currency rates diminishes the translated amount in DM.

Although the increase in the cost of laminated is not totally reflected to sale prices, it still leads to a considerable amount of transaction gains. Because both the opening and ending inventories belong to the last three months of the previous periods, it is obvious that the company

benefits from foreign currency increases even it sells below the actual price.

It is seen in Exhibit 3, that this internal transfer pricing policy leads the company's gross profit over net sales ratio to decline from 0.22 to 0.08 where as cost of good sold over sales increases by 14% with the revaluation of DM.

5.4. CONCLUSION AND RECOMMENDATIONS

The above implementation of temporal method of foreign currency translation which requires the use of both current and historical exchange rates is appropriate in inflationary environments as it gives more realistic information for the firm's current financial position. On the other hand most of the firms would not prefer to be evaluated by translated financial statements as it is possible that they earn profit in TL but a loss in DM.

The company must take several of precautions not only to minimize the negative effects of foreign currency fluctuations but also to improve its financial position. Initially, it can increase its capital by certain amount that will at least cover 2/3 of the total debts. The firm operating in the current position may loose all of its capital in an economic stagnation or go to the bankruptcy in case it is not able to pay its borrowings.

Secondly, rearranging the accounting exposure may be relevant strategy to reduce translation exposure. This can be done by adjusting the amounts of assets and liabilities included in the exposure until the sums of two are equal. Some methods of hedging a firm's negative exposure could be:

- Increasing TL cash balances at maximum level
- Reducing short-term liabilities by speeding up the payments of local and foreign currency payments.

Reflecting the increase in the cost of the good sold due to a increase in the foreign currency valuation to TL sale price of the products. This will produce greater amount of sales and accordingly will reduce net loss. However, this action may spoil the firm's price and tax saving strategy. Yet taxation is one of the reasons why raw materials are underpriced when they are being sold to the other company of the corporate family.

Any hedging strategy against foreign currency fluctuations may bring new burdens on management accounts. Hedging translation gains and losses will be more costly and difficult to accomplish when the size of the losses and gains are greater. For that reason, the result of any planned action should be well anticipated. From that point of view, FAS 52 does not seem to be very helpful as it is not very specific about how to manage positive or negative translation exposures.

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EXHIBITS

Remeasurement of Foreign Currency Financial Statements

Exhibit 1: Balance sheet

	January 1, 1994			December 31, 1994		
	TL	Exchange rate (Note 1)	DM	TL	Exchange rate (Note 1)	DM
CURRENT ASSETS	1,972,207,021		248,745	3,883,070,412		168,209
Cash	3,645,442	8,386	435	5,442,216	24,376	223
Bank accounts	25,420,739	8,386	3,031	58,622,888	24,376	2,405
Short-term accounts receivable	145,360,387	8,386	17,334	426,269,301	24,376	17,487
Due from advances	4,285,000	8,386	511	6,285,000	24,376	258
Other receivables	-			411,593,709	24,376	16,885
Raw materials inventory	1,770,189,253		224,655	2,921,115,000	Note 2	128,746
Prepayed taxes and funds	23,306,200	8,386	2,779	53,742,298	24,376	2,205
FIXED ASSETS	304,072,642		37,548	404,669,390		17,307
Long-term accounts receivable	257,985,736	8,386	30,764	367,302,204	24,376	15,068
Tangibles assets						
Machinery and equipments	840,171,488	Note 3	175,802	1,025,266,700	Note 3	177,159
Accumulated depreciation (-)	795,892,582	Note 3	169,233	991,641,812	Note 3	175,074
Val. ad. tax to be deducted in the following years	1,808,000	8,386	216	3,742,298	24,376	154
TOTAL ASSETS	2,276,279,663		286,293	4,287,739,802		185,516
SHORT-TERM LIABILITIES	1,296,135,468		154,559	2,832,969,032		116,220
Accounts payable	215,841,715	8,386	25,738	898,736,532	24,376	36,870
Notes payable	-			981,246,936	24,376	40,255
Other commercial payables	169,898,446	8,386	20,260	-		
Debts to partners	-			3,233,800	24,376	133
Taxes payable and other liabilities						
Deferred income taxes	431,956,307	8,386	51,509	581,687,879	24,376	23,863
Social security payments	478,439,000	8,386	57,052	683,552,085	24,376	28,042
Term expired, postponed or installed payments (-)	-			608,000,000	24,376	24,943
Provisions for payables and accrued expenses	-			292,511,800	24,376	12,000
LONG-TERM LIABILITIES	180,000,000		21,464	126,031,688		5,170
Debts to partners	180,000,000	8,386	21,464	-		
Provisions for payables and accrued expenses	-			196,031,688	24,376	8,042
SHAREHOLDERS' EQUITY	800,144,195		110,270	1,328,739,082		64,126
Paid in capital	194,000,000	1,022	189,824	194,000,000	1,022	189,824
Appreciation in fixed assets	266,296,736	Note 3		313,940,835	Note 3	
Retained earnings	339,847,459	Exhibit 2	-67,630	820,798,247	Exhibit 2	-123,646
TOTAL LIABILITIES & SHAREHOLDERS' EQ.	2,276,279,663		286,293	4,287,739,802		185,516

Remeasurement of Foreign Currency Financial Statements
Exhibit 2: Income Statement

	Year ended December 31, 1994		
	TL	Currency (Note 1)	(DM)
Gross Sales	10,561,113,582	Note 4	625,250
Other revenues	1,670,000	18,521	90
Net sales	10,562,783,582		625,340
Cost of good sold (-)	8,192,125,681	Note 2	577,843
GROSS PROFIT	2,370,657,901		47,497
Operating Expenses(-)			
Marketing, distribution, sale expenses	502,322,074	Note 2.b	31,790
General Adm. Expenses	615,845,859	Note 2.b	35,623
Other operating revenues and profits(+)			
Commission revenues	3,000,000	18,521	162
Other revenues from the operations	10,170,000	18,521	549
Foreign exchange gain			4,619
INCOME BEFORE TAXES	1,265,659,968		-23,824
Taxes payable and other legal obligations(-)	784,709,180	24,376	32,192
NET INCOME	480,950,788		-56,016
Retained earnings (31/12/1993)			-67,630
Retained earnings (31/12/1994)			-123,646

*In both balance sheets the retained earnings are the differences between total assets and liabilities plus the other shareholders equity accounts. Because the company didn't pay dividend within the year, the difference between the retained earnings of two year gives net income. Being all other accounts are translated, a translation gain of 4619 is the amount that is derived working backwards. This is the amount that must be plugged in to arrive at the net income figure.

Note 1: Exchange rates

Monthly averages	1993	1994
January	5,389	8,602
February	5,519	10,440
March	5,696	12,119
April	5,989	19,036
May	6,217	20,391
June	6,365	19,392
July	6,536	19,747
August	6,835	20,260
September	7,316	21,877
October	7,669	22,877
November	7,864	23,659
December	8,230	23,854
Average of the year	6,635	18,521

Year ended, 31 December	8,386	24,376
Rate in effect when the capital was paid in 2/1/1989:		1,022

* Exchange rates are the ratios of DM to TL stated by Turkish Central Bank

Note 2: Cost of Good Sold 1994

	TL	Exchange Rate (Note 1)	DM
Opening inventory	1,770,231,437		224,655
Laminate	1,353,800,000	Note 2.a	171,963
Chipboard	380,605,000	Note.2.a	47,292
Domestic laminate	18,426,437	6,635	2,777
Timber	17,400,000	6,635	2,622
Cost of production	9,343,009,244		481,934
Laminate	5,068,905,047	Note 2.a	249,236
Chipboard	2,249,773,304	Note2.a.	120,944
Timber	26,400,000	18,521	1,425
Secondary materials	553,763,860	18,521	29,899
Packaging materials	31,927,675	18,521	1,724
Labor	910,991,965	18,521	49,187
Manufacturing exp.	417,809,275	Note 2b	23,678
Depreciation expense	83,438,118	Note 3	5,841
COGS in 1994 (-)	8,192,125,681		577,843
1994 Balance	2,921,115,000		128,746
Laminate	1,830,670,000	Note 2.a	77,086
Chipboard	640,805,000	Note 2.a.	27,383
Domestic laminate	377,410,000	18,521	20,377
Timber	10,465,660	18,521	565
Secondary materials	54,856,840	18,521	2,962
Packaging materials	6,907,500	18,521	373

Assumption:

*It is assumed that the inventory carry historical cost and is translated by historical rate.

Note 2.a Raw materials

Laminate purchased in 1994

Date	Amount (TL)	Currency	DM
27/1/94	108,857,000	9,885	11,012
18/3/94	50,834,000	12,496	4,068
22/3/94	235,232,000	12,695	18,529
25/4/94	730,165,000	18,134	40,265
28/4/94	44,608,000	19,439	2,295
4/5/94	213,597,000	22,077	9,675
10/5/94	328,917,000	21,041	15,632
26/8/94	280,551,000	21,044	13,332
1/9/94	568,457,000	21,487	26,456
9/9/94	608,462,047	21,893	27,793
19/10/94	556,576,000	23,400	23,785
21/10/94	405,751,000	23,546	17,232
31/10/94	382,443,000	24,010	15,928
14/11/94	554,455,000	23,865	23,233
TOTAL	5,068,905,047		249,236

Laminates of opening inventory belong to:

Date	Historical cost (TL)	Currency	DM
27/10/93	447,545,000	7,725	57,935
1/11/93	316,868,000	7,729	40,997
30/11/93	234,560,000	7,750	30,266
27/12/93	354,827,000	8,297	42,766
TOTAL	1,353,800,000		171,963

Laminates of ending inventory belong to:

Date	Historical cost(TL)	Currency	DM
19/10/94	87,621,000	23,400	3,744
21/10/94	705,951,000	23,546	29,982
31/10/94	382,643,000	24,010	15,937
14/11/94	654,455,000	23,865	27,423
TOTAL	1,830,670,000		77,086

Chipboard inventory

Date	Historical cost (TL)	Currency	DM
NOV.-DEC./93	380,605,000	8,047	47,292
3/2/94	200,007,660	10,017	19,967
11/4/94	305,500,000	19,634	15,560
5/4/94	192,668,500	13,579	14,189
7/6/94	326,099,300	19,556	16,675
5/9/94	539,390,000	21,454	25,142
12/10/94	234,078,313	22,326	10,485
3/11/94	369,271,687	24,005	15,383
29/11/94	82,757,844	23,351	3,544
TOTAL	2,630,378,304		168,236

* Assumed that chipboard beginning inventory belongs last two months of 1993

Note 2.a Raw materials (continued)

Chipboard ending inventory

Date	Historical cost (TL)	Currency	DM
12/10/94	188,775,469	22,326	8,455
3/11/94	369,271,687	24,005	15,383
29/11/94	82,757,844	23,351	3,544
TOTAL	640,805,000		27,383

* Because detailed ageing of other items such as, secondary materials, timber and packaging materials can not be obtained, the average ageing could be calculated by using inventory turnover rate. However, these items are translated by yearly average rate since the inventory turnover rate is too high.

Note 2.b: Montly breakdown of of expenses

	Total	January	February	March	April	May	June	July	August	September	October	November	December
Manufacturing exp.	417,809,275	23,456,732	25,890,540	29,450,000	36,762,560	39,655,345	34,328,452	36,250,654	37,578,676	39,866,346	36,457,967	38,686,364	39,425,639
Mark,dist,sales exp.	502,322,074	52,360,000	53,176,000	47,256,956	45,187,234	41,360,000	40,380,000	36,076,455	38,727,632	38,269,302	37,187,545	36,780,950	35,560,000
General Adm. Exp.	615,845,859	42,750,000	42,890,500	35,320,800	45,750,000	48,680,000	55,225,708	58,400,500	58,320,675	54,165,850	55,900,000	57,455,855	58,985,971

Remeasured expenses over the months

	Total	January	February	March	April	May	June	July	August	September	October	November	December
Av. ex. rate (Note 1)		8,602	10,440	12,119	19,036	20,391	19,392	19,747	20,260	21,877	22,877	23,659	23,854
Manufacturing exp.	23,678	2,727	2,480	2,430	1,931	1,945	1,770	1,836	1,855	1,822	1,594	1,635	1,653
Mark,dist,sales exp.	31,723	6,087	5,093	3,899	2,374	2,028	2,082	1,827	1,912	1,749	1,626	1,555	1,491
General Adm. Exp.	35,288	4,970	4,108	2,914	2,403	2,387	2,848	2,957	2,879	2,476	2,444	2,428	2,473

Note 3: Machinery, Equipment and Accumulated Depreciation

Restated Machinery, equipment and accumulated depreciation

Years	Cost (TL)	1989	1990	1991	1992	1993	1994
1989	167,545,064	41,886,266	41,886,266	41,886,266	41,886,266		
1990	10,939,000		2,734,750	2,734,750	2,734,750	2,734,750	
1991	48,941,000			12,235,250	12,235,250	12,235,250	12,235,250
1992	11,653,000				2,913,250	2,913,250	2,913,250
1993	5,000,000					1,250,000	1,250,000
1994	25,140,000						6,285,000
Depreciation Expenses		41,886,266	44,621,016	56,856,266	59,769,516	19,133,250	22,683,500

- * Depreciation is calculated using the straight-line method applied over the four year service lines.
- * The ageing of property, plant and equipment is obtained according to the purchase date and original cost of purchase.
It is ensured that no revaluation is included in the ageing.
- * The revaluation on machinery and equipment and accumulated depreciation is eliminated.
- * Cost is translated from the historical rate of DM.
- * Depreciation charge for the period is calculated over the translated machinery and equipment.
- * All of the cost of depreciation are allocated to cost of production.

Translated Machinery, Equipment and Accumulated Depreciation

Years	Av.curr.for year	Cost (DM)	1989	1990	1991	1992	1993	1994
1989	1,139	147,098	36,775	36,775	36,775	36,775		
1990	1,634	6,695		1,674	1,674	1,674	1,674	
1991	2,648	18,482			4,621	4,621	4,621	4,621
1992	4,202	2,773				693	693	693
1993	6,635	754					188	188
1994	18,521	1,357						339
Total equipments:		177,159						
Depreciation Expenses			36,775	38,449	43,070	43,763	7,176	5,841
Acc. Deprec. (1994)		175,074						
Acc. Deprec. (1993)		169,233						

Note 4: Remeasured sales

DATE	(TL)	EXCHANGE RATE	(DM)	DATE	(TL)	EXCHANGE RATE	(DM)
6/1/94	62,465,000	8,427	7,412	3/8/94	36,792,500	19,766	1,861
11/1/94	34,861,850	8,498	4,102	5/8/94	230,463,160	19,821	11,627
14/1/94	37,825,000	8,509	4,445	18/8/94	22,743,000	20,014	1,136
17/1/94	22,067,500	8,531	2,587	23/8/94	123,400,750	20,481	6,025
21/1/94	190,948,000	8,627	22,134	2/9/94	53,435,000	21,671	2,466
28/1/94	1,670,000	9,906	169	4/9/94	20,708,000	21,453	965
28/1/94	76,172,000	9,906	7,689	16/9/94	42,529,500	21,901	1,942
29/1/94	89,575,250	9,885	9,062	30/9/94	21,924,000	22,018	996
29/1/94	102,455,500	9,885	10,365	30/9/94	47,176,000	22,018	2,143
4/2/94	198,309,500	10,047	19,738	30/9/94	143,554,500	22,018	6,520
10/2/94	128,062,500	10,056	12,735	4/10/94	137,942,500	21,905	6,297
18/2/94	280,200,500	10,303	27,196	6/10/94	137,270,000	22,181	6,189
28/2/94	82,548,050	10,667	7,739	18/10/94	109,450,000	23,288	4,700
7/3/94	55,065,000	11,340	4,856	19/10/94	206,200,000	23,400	8,812
10/3/94	75,550,000	11,754	6,428	25/10/94	215,145,000	23,741	9,062
17/3/94	90,400,000	12,170	7,428	7/11/94	138,000,000	23,745	5,812
22/3/94	69,540,000	12,695	5,478	14/11/94	4,550,000	23,865	191
24/3/94	96,162,500	12,837	7,491	24/11/94	41,610,000	23,599	1,763
29/3/94	185,199,500	13,087	14,151	25/11/94	102,500,000	23,481	4,365
29/3/94	691,748,000	13,087	52,858	9/12/94	190,552,000	23,349	8,161
7/4/94	36,579,000	23,291	1,571	29/12/94	208,019,000	24,376	8,534
13/4/94	82,550,000	20,517	4,023	TOTAL SALES	10,561,113,582		625,250
16/4/94	20,509,900	21,157	969				
27/4/94	27,755,592	20,601	1,347				
12/5/94	1,395,392,080	20,407	68,378				
18/5/94	97,502,500	19,762	4,934				
18/5/94	390,098,500	19,762	19,740				
26/5/94	29,114,000	20,234	1,439				
27/5/94	608,820,000	19,534	31,167				
2/6/94	554,495,000	18,670	29,700				
3/6/94	467,207,900	20,174	23,159				
3/6/94	57,888,000	20,174	2,869				
9/6/94	43,435,000	19,634	2,212				
16/6/94	32,527,500	19,634	1,657				
18/6/94	67,549,750	18,946	3,565				
20/6/94	617,081,800	18,975	32,521				
6/7/94	400,000,000	19,556	20,454				
18/7/94	58,240,000	19,785	2,944				
22/7/94	81,942,500	20,000	4,097				
28/7/94	255,460,000	19,714	12,958				
29/7/94	432,174,000	19,720	21,916				

Exhibit 3: Financial Statement ratios

Ratios	December 31, 1994	
	TL	DM
Ratio derived from only balance sheet accounts		
Current assets/ Short term liabilities	1.37	1.45
Cash+Bank acc.+S.term rec./ S.term liab.	0.17	0.17
Cash+Bank acc./Short term liab.	0.02	0.02
Liabilities/ Total assets	0.69	0.65
Short-term liabilities/ Total assets	0.66	0.63
Long-term liabilities/ Total assets	0.03	0.03
Shareholders' equity/Total assets	0.31	0.35
Shareholders' equity/ Fixed assets	3.28	3.71
Shareholders' equity/ Total liabilities	0.45	0.53
Paid-in-capital/ Total assets	0.05	1.02
Paid in capital/ Shareholders' equity	0.15	2.96
Retained earnings/ Total assets	0.19	-0.67
Retained Earnings/Shareholders' equity	0.62	-1.93
Ratios derived from the combination of balance sheet and income st.		
Net sales/ Total assets	2.46	3.37
Net Sales/ Shareholders' equity	7.95	9.75
Net sales/Current assets	2.72	3.72
Net Sales/ Accounts receivable	13.31	19.21
Net income/ Shareholders' equity	0.36	-0.87
Net income/ Total assets	0.11	-0.30
Net sales/ Shareholders's equity	8	10
Ratios derived only from income statement		
Net income / sales	0.05	-0.09
Cogs/ Net sales	0.78	0.92
Gross Profit/ Net sales	0.22	0.08

APPENDIX

APPENDIX A : Comparative effects of translation methods on the balance sheet

	TL	DM before TL depreciation 1 DM = 24,974 TL 2/1/1994	DM after TL depreciation 1 DM = 27,204 TL 26/1/94			
			Current Rate	Current- Noncurrent	Monetary * Nonmonetary	Temporal **
Current assets	3,883,070,412	155,485	142,739	142,739	152,327	142,739
Fixed assets	404,669,390	16,204	14,875	16,204	16,204	16,204
Total assets	4,287,739,802	171,688	157,614	158,943	168,531	158,943
Short term liabilities	2,832,969,032	113,437	104,138	104,138	104,138	104,138
Long term liabilities	126,031,688	5,047	4,633	5,047	4,633	4,633
Shareholders' equity	1,328,739,082	53,205	48,843	49,758	59,760	50,172
Total liabilities & Sh.Eq.	4,287,739,802	171,688	157,614	158,943	168,531	158,943
Accounting exposure (TL)			9,726,573	7,686,487	-14,617,881	6,763,359
Translation gain (loss) (DM)			-4,362	-3,447	6,555	-3,033

* Other current assets	961,955,412	35,361
Inventories	2,921,115,000	116,966
Total assets	3,883,070,412	152,327

**Other current assets	961,955,412	35,361
Inventories	2,921,115,000	107,378
Total assets	3,883,070,412	142,739

Note:

a) Although the figures of the financial statements belong to the following case study, this example formed only to highlight the financial statements effects of the major translation methods described.

b) Assume inventories are carried at current cost. If they were carried at historical cost, the temporal balance sheet would be identical to the monetary-nonmonetary method.

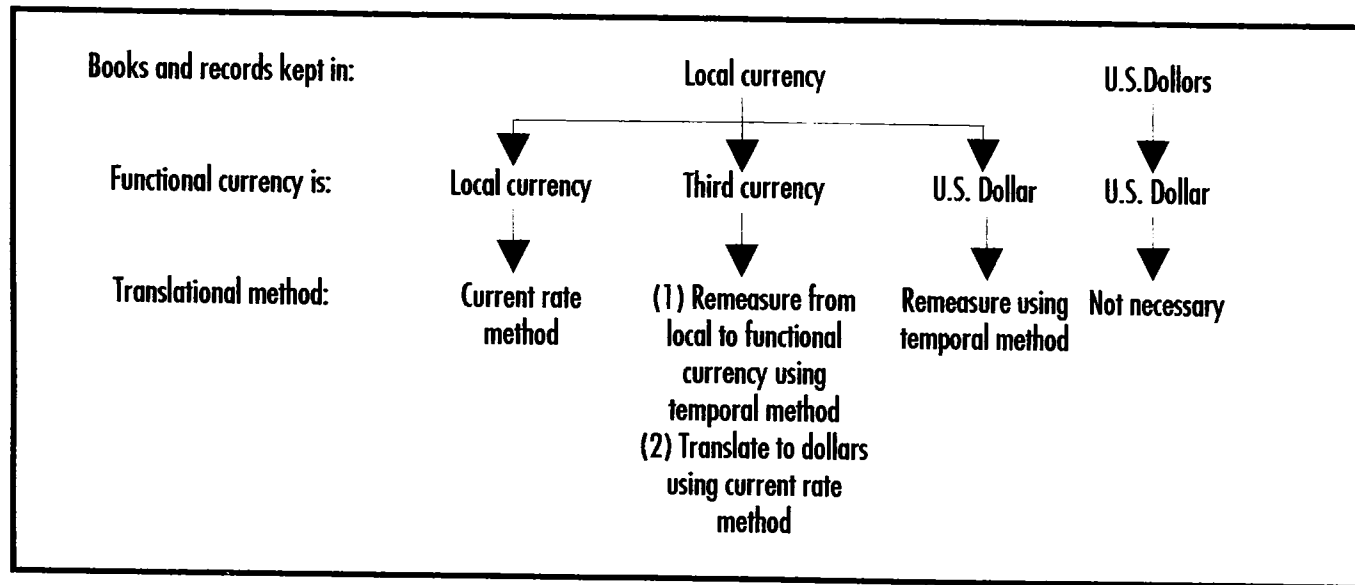
APPENDIX B : Comparative effects of translation methods on the income statement

	TL	DM before TL depreciation 1 DM = 24,974 2/1/1995	DM after TL depreciation 1DM =27204TL 24/1/95			
			Current Rate	Current- Noncurrent	Monetary * Nonmonetary	Temporal **
Sales	10,561,113,582	422,884	388,219	388,219	388,219	388,219
Other operating revenues	14,840,000	594	546	546	546	546
Cost of good sold (-)	8,192,125,681	328,026	301,137	301,137	328,026	328,026
Operating expenses (-)	1,118,167,933	44,773	41,103	41,103	41,103	41,103
Operating Profit	1,265,659,968	50,679	46,525	46,525	19,636	19,636
Taxes payable and legal obligations (-)	784,709,180	31,421	28,845	28,845	28,845	28,845
Translation gain(loss)	-	-	-4,362	-3,447	6,555	-3,033
Net income (loss)	105,903,168	19,258	13,317	14,233	-2,654	-6,176

Note:

- a) This example assumes that the income statement is prepared the day after the devaluation
- b) This example assumes all translation gains or losses were immediately reflected in current income

APPENDIX C: Translation according to the definition of the functional currency (FAS 52)



Source: S. ARPAN & RADEBAUGH, *International Accounting and Multinational Enterprises*, 1985.