The objective of this paper is to analyze the procedures used by multinational enterprises to distribute the income generated by its foreign subsidiaries, and how they allocate the taxes paid on this income through the fiscal jurisdiction in which they operate, from the institution based view. The analytic research method was applied, through the revision of the available literature in order to determine the causes and effects of income shifting, as a fiscal strategy applied by MNE. It can be concluded that MNE use organizational strategies to take advantage of the comparative advantages of the different countries in which they operate, resulting in intercompany trade. When setting the transfer prices in which companies trade goods and services, the opportunity arises so that MNE shift their extra income to jurisdiction with lower corporate tax rates, and therefore minimize its fiscal burden.

**Keywords**: Multinational firms, transfer pricing, income shifts.

**JEL**: D33,D40,E31,F02,F13,F23,F42,G12,G13,H26,H32

**Resumen**

El objeto de este trabajo es analizar los procedimiento utilizados por empresas multinacionales para distribuir el ingreso generado por sus
filiales en el extranjero, y como se distribuyen los impuestos pagados sobre estos ingresos entre las jurisdicciones fiscales, desde el punto de vista basado en las instituciones. Se aplicó el método analítico de investigación, en la revisión de la literatura disponible para determinar las causas y los efectos de la distribución del ingreso, como estrategia fiscal aplicada por las EMN. Se puede concluir que las EMN utilizan estrategias organizacionales para aprovechar las ventajas comparativas de los diferentes países en los que operan, resultando en el comercio intercompañía. Al pactar los precios de transferencia mediante los cuales intercambian bienes y servicios, surge la oportunidad para que las EMN desplacen sus ingresos excedentes a jurisdicciones con tasas impositivas menores y de esta manera minimicen su carga fiscal.

**Palabras clave**: Empresas multinacionales, precios de transferencia, desplazamiento de ingresos.

**Introduction**

The increase in the number of multinational firms operating in the international economy has led to greater dynamism in the inter-firm trade. Multinational firms have the purpose to provide goods and services of equal value and quality in relation to price to consumers and costumers as the primary claimants around the world, regardless of their personal characteristics, nationality, ethnic origin and religious creed. Intrafirm transference of prices between the different subsidiaries may determine the raw materials and commodities intrafirm are flows plus the logistics costs derived of locations. Taxation rates on foreign investments of multinational firms play a crucial role in alternative locations choices (Devereux and Griffith, 1998). Interfirm commerce is sustained on a shared production scheme with artificially established export prices to favor transference of earnings to the home country while jobs created are subsidized by Mexican economy.

This has forced the tax authorities of the jurisdictions in which they operate the secompanies to implement more stringent regulations on transfer pricing in order to avoid shifting income tolowertax rate jurisdictions. About this Robbins(2002) notes that although international business has been around forcenturies, multinational firms are relatively a recent phenomenon. They are a natural result of the global economy. Multinational firms use their operations around the world to develop global strategies. Rather than confine themselves to their domestic borders, search the world to find competitive advantages.
Multinational firms should be required by national and global institutions to fulfill policies regarding accountability, transparency on some relevant issues such as profits, taxes, etc.

Multinational enterprises are defined as firms operating with foreign direct investment (FDI) directly control and manage value-added activities in other countries (Peng, 2010). It has been assumed that foreign investments should be highly responsive to local differences in the investment climate, institutional financial arrangements, rates of return, taxes and other regulations and labor costs. In the last years, foreign direct investment have grown in less developed countries, attracted by tax incentives, environmental flexibility and some other advantages offered by cheap labor, etc. There are several variables considered as determinants of FDI such as macroeconomic stability, labor costs, corporate taxation, corporate governance, cultural and language features, etc. variables considered in the context. Multinational firms can be regarded as important factors in the globalization process.

Governments compete to attract multinational firms, hoping to increase tax revenues, create jobs and stimulate economic activity. In order to attract FDI, governments offer incentives to multinational firms such as tax exemptions, government support agreements, grant infrastructure or lax environmental and labor regulations. Among the contributions foreign-owned companies have to demonstrate are the inward flow of foreign capital and technology, tax and balance of payments contributions, spillovers on local business and communities, rate of employment rise, improvement of competitive advantages, etc.

Other variables may be considered for location choices in international markets such as corporate taxation. Foreign capital restrictions are not significantly related to the taxation levels. Multinational firms are likely to deter their operations in locations where the corporation taxation is high unless the after-tax rate of return of investments is also high (Mooij and Ederveen, 2003).

Robbins (2002) notes that managers of multinational firms face a very wide range of challenges, in areas where they operate, such as different political systems, laws, cultures and customs. But these differences may originate both problems and opportunities. For example, currency devaluations of the Mexican peso lower export prices and raise import prices, and provoke the adoption of direct protectionist forms which may cause some important effects on trade adjustments and induce FDI re-shufflings within Mexico. One of the challenges facing governments and multinational firms, tax collection
due to multinational enterprises operating in multiple tax jurisdictions that have different rules, regulations, policies and procedures. Thus, multinational corporations cannot be considered as an isolated unit but as a group of firms operating in a complex international environment. An important aspect of multinational firms is the inter-firm trade. Durán and Ventura (2003) define intercompany trade and commerce that takes place within companies under the same organizational structure and ownership of capital between parent and subsidiary or subsidiaries or between the subsidiaries and affiliates.

This situation places multinational firms in a favored position. A key reason why the intercompany trade differs from trade of full competence results from the fact that multinational business can alter their transactions to minimize their tax burden around the world. For example, firms may use transfer pricing techniques that allow them to shift profits to jurisdictions with low tax rates and thus minimize their overall tax burden (Clausing, 2000). It is known as transfer pricing, the price at which the parties exchange goods or services related. Guidelines Applicable to Transfer Pricing and Multinational Enterprises Tax Administrations of the Organization for Economic Cooperation and Development ("OECD") states that the transfer prices are significant for both tax payers and tax administrations because that largely determine the income and deductions, and therefore the tax base of the associated companies in different tax jurisdictions (OECD, 1993).

More than 60 governments have adopted regulations regarding transfer pricing. Regulation of transfer prices are based on full competence principle ("arm’s length principle"). This means that the transfer prices of goods and services on intercompany transactions must be based on an analysis of prices agreed in comparable transactions between two or more unrelated parties in a fully competitive market. In Mexico, the institution responsible for compliance with these regulations is the Tax Administration Service (Servicio de Administración Tributaria, SAT), the rules and regulations applicable to transfer pricing in Mexico are described in Articles 86 paragraphs XII, XIII and XV, 215, 216, 216-bis and 217 of the Law on Income Tax of Mexico (Ley del Impuestos sobre la Renta, LISR). Article 216-bis of the Income Tax Law refers to the special rules applicable to companies in the maquiladora industry. In addition, as part of the tax report issued by the external auditor should reveal the transactions carried out with related parties abroad and in Mexico, and answer the questionnaires concerning the revision of taxes.

This paper analyzes the organizational strategies employed by
multinational firms around the world, in order to exploit the competitive advantages of host countries. In particular, the tax regulations applicable to transfer pricing to minimize their tax burden by placing income in tax jurisdictions with lower tax rates. This is in response to different tax rates observed within the member countries OECD.

This document is divided into the introduction and four sections. The next section reviews the economic literature available in relation to the phenomena of multinational firms, international production, intercompany trade and relevant aspects of transfer pricing. The same section also tries to put all this information in the framework of the theory based on institutions. The second section presents three types of organizational strategies that correspond to the evolution of multinational firms. These strategies give rise to intercompany trade. The third section presents a discussion of the problems faced by multinational firms and tax authorities to determine the taxable base and the application of transfer pricing methods to determine that the intercompany transactions are agreed on the principle of full competition. Finally, the fourth section, it is illustrated the way in which multinational enterprises can minimize their tax burden through transfer pricing.

**Inter-firm trade and transfer pricing: A review of the theoretical framework.**

In order to explain the phenomenon of multinational firms is necessary to start reviewing the classical theories of international trade, which have their origin in the theory of Adam Smith’s absolute advantage and comparative advantage of David Ricardo, which were systematized by Eli Heckscher and Bertil Ohlin. The Heckscher-Ohlin model states that countries export products that use their abundant and economic factors of production and import products using scarce factors of production in the country. During the 1970s, emerged the "new trade theory" addressing issues of trade specialization, and also the location of productive activities in different countries and regions (Helpman and Krugman, 1985).

As for research related to inter-firm trade, Durán and Ventura (2003) argue that the interest of economists associated to inter-firm trade in relation to international production, mainly to the impact of multinational firms in the international distribution of income, and tax issues arising from transactions between related companies. The research was focused on explaining the
internationalization of production and its relationship with FDI. Among the most prominent studies include: Vernon (1996) studied the life cycle of the product. The issue of internationalization of production has been discussed by authors such as Hymer (1976), Kindleberger (1990), Caves (1971), among others. In these works the concern is for interfirm trade that appears as a side issue.

However, the Japanese researchers, Kojima and Ozawa (1984), based on the Japanese experience, suggested that FDI would be an efficient conduit of trade in intermediate products between the companies involved and those on investment (subsidiaries) that can benefit from comparative advantages complementing the activities of their parent companies. As for the research on transfer pricing, transfer of goods, technology and services between related parties located in different countries, it is suggested that the price agreed in such transactions within the multinational firms, it is set based on various conditions determined by company management (Durán and Ventura, 2003). Early studies in this line were those of Cook (1955) and Hirshleifer (1956), followed later by Horst (1971), and Itagaki (1982). These works share the concern that the transfer prices erode the tax bases of host countries.

Moreover, from the point of view of the leader strategies on strategy, vision-based institutions, provides a framework within which to develop this work. It can start from the definition of institutions provided by North (1990), who defines institutions as humanly planned constraints that structure political interaction, economic and social development. These consist of informal institutions (sanctions, taboos, customs, traditions and codes of conduct), and formal institutions (constitutions, laws, property rights). An institutional constraint such as formal and informal rules, affecting entrepreneurship, although this entrepreneurship flourishes around the world, their overall development is uneven (Peng, 2010: 130). The vision-based institutions can help to explain how taxes affect intercompany trade patterns of multinational firms and explain the fact that multinational enterprises invest in subsidiaries around the world in order to exploit the comparative advantages of different countries.

**Organizational strategies of multinational firms**

According to the United Nations Conference on Trade and Development (UNCTAD, for its acronym in English), the ability of multinational
firms to contribute to international economic integration is a result of their own attributes and how they respond to the political environment and economic context in which they operate (UNCTAD, 1993). Mexican multinationals, large and medium size businesses operate in many different industries using their organizational and technical capabilities and competencies to develop and deliver market-based products and services that meet the needs of local consumers.

To achieve these tasks, Mexican multinationals design and implement strategies to create scale and scope economies; engaging in strategic alliances, joint ventures, partnerships, and associations with other partners, NGOs, community developers, supply and distribution chain partners; leveraging logistical networks; decreasing prices; removing and liberating market constraints, etc. (Rangan, Quelch, Herrero and Barton, 2007, UNDP, 2008). Strategies of multinational firms evolve as they responded to various pressures, challenges and opportunities, among which can be mentioned the advances in information and communication technologies, convergence of consumption patterns around the world, intensifying competition and opening markets, etc.

Some markets in developed and developing countries are expected to tighten in the next following years due to increased price competition and consolidation among manufacturers, leaving Mexican multinational firms to seek out new markets in other developing and emergent economies. CEMEX operated in a highly protected legal environment and no significative competition on price until the 1990s and controlled 65 percent of the market share in Mexico. Other good example is the recent success of Wal-Mart, with its proprietary distribution sites and aggressive supplier price targets, has helped alter the retail food landscape and set new competitive standards in Mexico. With no value added tax on food, the efficiencies have had impact across the supply chain and have been passed on as lower prices to consumers (Goldstein, 2007).

One important lesson to be learned by multinational firms is to manage price strategies to improve their market performance in less developed economies through the scalability of innovations and by discarding traditional approaches to price-performance improvements. These new strategies involve significant changes in the way production is organized across borders, which has led multinational firms to locate a wider range of value-generating activities abroad (UNCTAD, 1993).
Under the strategy of vertical expansion, the multinational firms exploits a comparative advantage in terms of production factors and prices, etc by locating intangible assets and human resources in foreign economies, either through backward vertical expansion to procure production and distribution of a raw materials, inputs and components, or through a forward vertical expansion by distributing and selling goods and services. Vertical foreign investment encourages multinational firms to undertake foreign production in order to give more certainty to supply and asset specificity.

Multinational corporations operating in low income market segments are consciously cost management systems oriented for innovation, organization, manufacturing, distribution, etc., to achieve a competitive price performance, capital efficiency and sustainable profits. NAFTA has resulted in reallocation effects of productive sectors based on changes in relative prices, with very poor impact on the performance at firm-level learning, technical inefficiencies and lack of innovation. Below are three types of organizational strategies, described in the World Investment Report published by UNCTAD (1993), corresponding to the evolution of multinational firms. All these organizational strategy can result in inter-firm trade.

**Strategy of party autonomy**

This strategy consists in establishing subsidiaries operating independently in the host countries. The main link between the parent and its subsidiary abroad is by controlling shareholder. Other relationships may include technology transfer and provision of long-term capital. The parent company exercises little control over the subsidiary, while it is profitable. In general, an independent subsidiary is responsible for most of the generative process of production value, through which develops relationships with local suppliers and subcontractors. It also employs local workers and managers, conducts its financial transactions with local financial intermediaries, and may participate in international trade with other countries. Companies can control many natural autonomous subsidiaries, each one serving a different host country (UNCTAD, 1993).

An independent subsidiary can be seen as a replica of the parent of the multinational firms in its new location. According to UNCTAD (1993), there are three organizational strategies that can take the multinational firms. The evolution of strategies of multinational firms can be schematically shown in
the following diagrams (See Figure 1).

![Figure 1. Strategy autonomy of parties](image)


**Outsourcing strategy (Outsourcing)**

Some multinational firms participate in international production through subcontracting (outsourcing). The activities in host countries are linked to processes performed in another territory, mainly in the country of origin of the multinational firms (Figure 2). In the case of services, some multinational firms use foreign affiliates or subcontractors to process information or develop software. Services have become tradable due to technological advances in computing and communication (UNCTAD, 1993).

The international outsourcing of production represents the transfer of value generating activities of territories, other than the country of origin of multinational firms. Also this transfer of value generating may be different than other end-use countries where the products are destined. The principal reason for outsourcing is to exploit the comparative advantages of host countries. Production is controlled by the multinational firms through stock controls or through contracts with local firms, which allows the multinational enterprises to concentrate in some certain parts of the value chain, while the subcontractor is specializing in the production, or other intensive labor process (UNCTAD, 1993).
Complex integration (Integrated Production Systems International)

For some multinational firms, international production can occur almost anywhere in the value chain. The complex integration strategy is based on the firm’s ability to locate their production, or supply of resources, where more profitable. Under the complex integration, any subsidiary operating in any territory can perform for the whole multinational firm. Each transaction is valued in terms of its contribution to the value chain. The complex integration required to locate various functional activities—not only production but also research and development, finance, accounting, etc., where they can be more successfully performed according to the strategy of the multinationals (UNCTAD, 1993). Under the complex integration model, there is an interrelationship between the functions, processes and various territories in which the MNE operates. However, not all elements of the value chain are integrated in the same grade (Figure 3).

Multinational firms transfer pricing and taxes.

Due to the growth of FDI and increased activities of multinational firms, a greater number of activities in the value chain of enterprises groups of companies take place in different countries. This generates complex questions about where taxable income is generated by multinationals, as this is distributed among firms located in different countries, and as distributed
taxes paid on this income between tax jurisdictions (UNCTAD, 1993). To answer these questions, it is necessary to know the position of tax authorities regarding tax rates applicable to multinationals operating in two or more tax jurisdictions. The tax rates of each country will depend on whether the country uses a tax system that is based on residence, based on the origin, or both.

![Diagram of complex integration strategies]

**Figure 3.** Strategies of complex integration  

In a tax system based on residence, a country will include in its tax base all or part of the revenue, including revenue generated outside the country, any person or entity considered a resident in that jurisdiction. In a tax system based on the origin, a country includes in its tax base all or part of the revenue generated within their tax jurisdiction, regardless of the taxpayer's residence. Often, because these systems are applied together, usually it is given to treat each independent entity within the group of multinational firms. The OECD member countries have adopted this approach, independent entities as the most reasonable to achieve equitable outcomes and minimize risks of double taxation. Thus, each group member is subject to a tax on income derived from the country of residence, based on the origin (OECD, 1993).

To apply the approach of independent entities, when goods cross borders through the internal channels of multinational firms, it is necessary for tax purposes to agree in a transfer price. Transfer prices are the prices at
which companies transfer tangible and intangible goods, or provide services to related parties (OECD, 1993). However, when tax rates differ among the jurisdictions in which they operate a multinational firm. The multinational firm have an incentive to agree on transfer price so as to reduce their tax burden, reporting higher profits in the country where the profits are recorded more slightly (Bernard and Weiner, 1990). The number of multinational that agree upon transfer prices in a way that minimizes their tax liability restricted by the regulations of their countries of origin and host countries and the tax authorities’ ability to enforce these regulations (Bernard and Weiner, 1990).

In Mexico, the laws applicable to transfer pricing are found in Articles 86 paragraph XII, XIII and XV, 215, 216, 216-bis and 217 of the Income Tax Law. Article 215 of the Income Tax Law establishes the use of arm’s length principle (“arm's length principle”) to evaluate the transfer pricing agreed with related party abroad. Article 216 establishes the transfer pricing methods that taxpayers may use to assess compliance with arm’s length principle.

Article 86 Section XV, establishes the hierarchy of transfer pricing methods in the order laid down in Article 216, starting with the traditional transactional methods: Method comparable uncontrolled price (Método de precio comparable no controlado, "MPC"), compares the price agreed in the related party transactions with or between independent parties in comparable transactions. As addedcostmethod (Método de costoadicionado, "MCA"), which is to determinethe selling priceof goods, the provision of a service or compensation of any other transaction between related parties, multiplying the cost of goods, services or the operation concerned by the result of adding to the unit the gross profit percent that would have been agreed with or between independent parties in comparable transactions. On the other hand, there are transactional methods based on utilities: Utility partition method (Método de partición de utilidades "MPU"), which is to allocate operating income obtained by related parties in the proportion that had been allocated to or between independent parties.

Residual method of utilities partition (Método residual de partición de utilidades "MRPU"), which is to allocate minimum operating income obtained by related parties in the proportion that had been assigned with or between
unrelated parties, and then determine the residual value of the transaction. The residual profit is allocated among the related parties involved in the operation taking into account, inter alia, significant intangibles used by each, in proportion as it had been distributed with or between independent parties in comparable transactions.

Transactional margin method of operating income (Método de márgenes transaccionales de utilidad de operación "MMTUO"), which is to identify related party transactions, income from operations that have obtained comparable companies or independent parties in comparable transactions and operations, based on factors that take into account profitability variables such as assets, sales, costs, expenses or cash flows. These methods fulfill the application of arm’s length principle set forth in the Guidelines Applicable to Transfer Pricing for Multinational Enterprises and Tax Administrations of the OECD.

**Minimizing tax burden through transfer pricing**

Politicians constantly worry about the difference between the tax rates of countries, particularly fear that if tax rates are too high may lose economic activity, discourage investment, which can be moved to countries with lower tax rates (Bartelsman and Beetsma, 2001). As the government needs to ensure that in designing their tax systems, maintain their tax base and provide a favorable climate for business and investment (UNCTAD, 1993). However, the difference between the tax rates not only induces shifts in the business, but also can generate countable income shifts between firms across countries. These income shifts are not prominent in the political debates. However, if politicians were concerned about the shift of income, so it’s about moving countable income of industrialized economies to the so-called "tax havens" small countries with very low rates of corporate taxes (Bartelsman and Beetsma, 2001).

The empirical analysis developed by Bartelsman and Beetsma (2001), shows the import of the shift in income between industrialized economies as a result of differences in tax rates. There are two ways in which multinational firms can shift their income from countries with high tax rates to countries with lower tax rates. First, the financial structure of the subsidiaries is relevant to the taxation of multinationals. In particular, it is relatively more attractive financing to subsidiaries in countries with high tax on credit, instead of capital,
with loans extended by the parent or other subsidiaries in different countries. The second channel for income shifting through borders refers to prices that are used in interfirm transactions in the international trade in goods and services (Bartelsman and Beetsma, 2001).

Many times the strict application of arm's length principle, it is difficult to put into practice. For example, for many transactions interfirm there is no comparable transactions between third parties independent or not. Therefore it is difficult to apply a traditional transactional method. Thus, multinational firms can reduce their tax liabilities reporting transfer prices as low as possible. The shift of income leads to differences between reported income and the "true" income generated in the business. The usefulness of the reported production is reduced or increased in countries with relatively high or low in taxes, because the companies agree lower or higher prices than the market in their interfirm transactions (Bartelsman and Beetsma, 2001).

Conclusions

Multinationals are firms that operate with FDI, generating value-added activities in different territories. Multinationals make the decision to locate in certain countries because it has the opportunity to exploit comparative advantages of these countries, so it is no longer possible to consider the multinational firms as an isolated unit but rather as a group of firms operating in a global context.

Organizational strategies of multinational firms generate interfirm trade across borders, so that multinational firms are forced to agree a transfer price to exchange goods and services. This has created challenges and opportunities for governments and multinational corporations, especially in fiscal matters. For this reason the tax authorities of more than 60 countries have adopted regulations regarding transfer pricing, which are based on the principle of full competition, and the traditional transaction methods and based on earnings embodied in the Guidelines Applicable to Mater of Transfer Pricing for Multinational Enterprises and Tax Administrations of the OECD.

However, due to the existence of different tax rates between different jurisdictions in which a multinational may operate, there is an incentive for these agreed upon transfer prices as low as possible, and thereby it displaces the extra revenue to the jurisdictions with a lower tax rate. For this reason it is necessary that the tax authorities apply more efficient regulations on transfer
pricing to avoid the tax bases of governments to be eroded by such strategies put into practice by multinational firms.

Intergovernmental agreements between the involved nation-states to regulate operations and activities of multinational firms should emerge to have cross-national policies to control on issues such as accounting guidelines and procedures, investments, financial accountability, tax and profits, transfer of prices, social corporate responsibility, etc.

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[22] SAT (Sistema de Administración Tributaria), Ley del Impuesto sobre la Renta, México.

