## POLICY REFORM: THE SOCIAL DIMENSION

## WEEK 3: DAY 3

# RURAL SERVICES AND INFRASTRUCTURE: TRANSACTION COSTS AND INSTITUTIONAL ECONOMICS 

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## 1. INTRODUCTION

Today, we look at transaction costs and institutional economics. There is nothing exclusively developmental about the subject - like all economic theory, the subject has universal application. It is the different constraints on outcomes that characterise development issues, not the nature of the underlying theory.

Transaction costs and institutional economics are two names for fairly similar concepts, and, whilst we do distinguish them later on, it is not very important. Economists use the two terms inter-changeably, so it is really not worth trying to separate them out. Both refer to a major extension of traditional economic theory, so much so that some think it represents a new paradigm. We begin by examining this a little. You might like to turn from the page now and jot down your idea of what a paradigm is. Then read on.

- A paradigm is a conceptual framework, an over-arching vision, a way of explaining things, a group of theories and ideas which have a certain consistency.

What is termed the 'neo-classical' economics paradigm, which can be traced back to Adam Smith in 1776, has stood the test of time well, but even its most strenuous supporters recognise that it has to change with the times. Summers said,

- 'Adam Smith's world was of widgets* and corn, not McDonalds and Microsoft. We don't have ways of thinking about the profound changes in economic life caused by Information Technology and the development of the service industries.' ${ }^{1}$

The unreformed neo-classical economics model has proved durable partly because economists have been conservative in their use of theory and reluctant to change.

Nevertheless, there are signs that a paradigm shift is under way. One of the new paradigms is called New Institutional Economics (NIE), and we look at one model within this, known as the Transaction Cost Economics model. NIE looks at the economic world as being dominated by organisations. Instead of just markets being the focus, many relationships between economic agents are considered, of which markets are but one example.

Because it is still developing, the transaction cost model is not as precise or operational as neo-classical economics. It is particularly useful because it helps explain the integration of agriculture, processing and retailing under way in many countries today.

We look first at the theory of transaction costs and then at some examples of change in the agrifood industry from different countries. You may like to move between the two parts of the unit and dip in, rather than read straight through.
${ }^{1}$ Lawrence Summers, Chief Economist of the World Bank, 1989-94, US Deputy Treasury Secretary, 1995-6. Note: the word 'widget' means an unspecified manufactured product. Quoted in The Independent, 16.10.95, page 25.

Transaction costs turn up in two kinds of models. We will call them simply Types A and B.

## Types A and B

- Type A models accept the notion of a market economy which tends to equilibrium, but introduce the costs of doing deals in markets. These costs are called transaction costs.
- Type B models also bring in transaction cost, so sometimes look like type A. However, Type B models reject the idea of equilibrium.

Unfortunately, Types A and B sometimes get lumped together under the heading of 'New Institutional Economics'. You can distinguish Type A from Type B by looking at the underlying assumptions. Traditional neo-classical economics is based on three assumptions. If you have done economics already, turn from the page now, and see if you can write them down. For instance, if you have ever hear of 'Supply and Demand', what assumptions lie behind that?

The three assumptions are that:

- economic agents act rationally to maximise their goals
- they act with perfect knowledge (so, as we shall see, there are zero transaction costs)
- economic interactions, systems, markets or whatever have a tendency to equilibrium because of the law of diminishing returns

On the basis of this, we can construct theories that allow forces of supply and forces of demand to be brought into balance through the price mechanism. These theories have proved immensely attractive to economists and politicians alike, as the economic chaos that occurred in Communist countries in 1989-91 demonstrated! Once policy-makers believe that 'markets are marvellous', and the best thing for government to do is leave them alone, it is literally every man and woman for themselves. The experience of 1989-91 confirmed the lessons of Structural Adjustment policies in the 1980s, that markets are often flawed. External costs and benefits, monopoly forces, and other 'imperfections' mean that market forces on their own are not a satisfactory way for a government to deal with economic policy.

And transaction costs are another reason why market forces may not work very well on their own.

Now turn back to the three assumptions and recall our two types of transaction cost models, type A and Type B.

A Type A model accepts the first and third assumptions but not the second. Instead of everyone knowing all the prices and market opportunities, uncertainty rules. This
makes life rather difficult for both economic agents and the economist trying to understand them, as you can imagine! The question is,

- if the second assumption does not hold, what can be done to revise the neoclassical model so it is still operational?

Some of the uncertainty is handled by using what are called 'risk management' techniques. For instance, instead of knowing for sure that the price of a product is $£ 12$, we may be able to assume that economic agents act as though the price were $£ 12$, with a variance of $£ 3$. Another example is: an investor may calculate the return to an investment, and then see what happens if costs are $10 \%$ higher and product prices $10 \%$ lower. This sort of risk management technique is called 'sensitivity analysis'.

All such techniques rest upon having at least some knowledge about markets and prices, even if it is not perfect. As a rule of thumb, the less perfect the state of knowledge, the less applicable will be the neo-classical economic model.

A major area of uncertainty surrounds exchanges. Finding buyers and sellers, agreeing an exchange and ensuring it is all fair and above-board, these are important areas of uncertainty, and Type A economic models handle it by introducing transaction costs, as noted above. We look at the particular Type A model known as 'transaction costs economics' below.

## Type B models

The supporters of Type B, also relax the 'perfect knowledge' assumption and are happy to incorporate transaction costs. However, they go further and argue that once an uncertain world is recognised, the first assumption must also be abandoned. Economic agents, they say, are rational but seldom maximisers. Most people try to reach a satisfactory level rather than a maximum level in their lives. To use the jargon, economic agents are 'satisficers', not maximisers, because of the lack of accurate information, and hence imperfect knowledge.

* Whilst the neo-classical model can just about accommodate Type A, it is sunk completely by Type B. Can you see why?

If we do not know whether an economic agent is successful or not in achieving his or her goals because they are satisficing goals, set by the individual, economic analysis becomes very difficult and its conclusions vague. Psychology is the preferred discipline to use rather than economics because every problem and organisation must be looked at as unique. What you regard as a success, I may see as a failure, so we cannot make any general pronouncements. For this reason, Type B attracts management specialists who look at each business on its own, rather than try to formulate general rules.

Herbert Simon, Nobel Laureate and professor at the University of Chicago, is sometimes regarded as the founding father of Type B models. Box 1 is taken from his address on receiving the Nobel prize. You will see he uses the term 'bounded rationality'. By this, Simon means that economic agents can only act rationally within the boundaries of what they know. The less accurate information they have the
more bounded they are in what they can rationally choose to do. We meet 'Bounded Rationality' again in the unit. Note that his references to 'classical' mean the same as our 'neo-classical'.

## Box 1: Theories of the Business Firm

The general features of bounded rationality - selective search, satisficing, and so on - have been taken as the starting points for a number of attempts to build theories of the business firm incorporating behavioural assumptions. Examples of such theories would include the theory of Cyert and March, William Baumol's theory of sales maximisation subject to minimum profit constraints; Robin Marris' models of firms whose goals are stated in terms of rates of growth; Harvey Leibenstein's theory of 'X-inefficiency' that depresses production below the theoretically attainable; Janos Kornai's dichotomy between supply-driven and demand-driven management; Oliver Williamson's theory of transactional costs; the evolutionary models of Richard Nelson and Sidney Winter (1973); Cyert and Morris DeGroot's (1974) models incorporating adaptive learning; Radner's (1975a,b) explicit satisficing models; and others.

Characterised in this way, there seems to be little commonality among all of these theories and models, except that they depart in one way or another from the classical assumption of perfect rationality in firm decision making. A closer look, however, and a more abstract description of their assumptions shows that they share several basic characteristics. Most of them depart from the assumption of profit maximisation in the short run, and replace it with an assumption of goals defined in terms of targets - that is, they are to greater or lesser degree satisficing theories. If they do retain maximising assumptions, they contain some kind of mechanism that prevents the maximum from being attained, at least in the short run. In the Cyert-March theory, and that of Leibenstein, this mechanism can be viewed as producing 'organisational slack,' the magnitude of which may itself be a function of motivational and environmental variables.

Finally, a number of these theories assume that organisational learning takes place, so that if the environment were stationary for a sufficient length of time, the system equilibrium would approach closer and closer to the classical profit-maximising equilibrium. Of course they generally also assume that the environmental disturbances will generally be large enough to prevent the classical solution from being an adequate approximation to the actual behaviour.

What then is the present status of the classical theory of the firm? There can no longer be any doubt that the micro assumptions of the theory - the assumptions of perfect rationality are contrary to fact. It is not a question of approximation; they do not even remotely describe the processes that human beings use for making decisions in complex situations. (Our emphasis)

Moreover, there is an alternative. If anything, there is an embarrassing richness of alternatives. Today, we have a large mass of descriptive data, from both laboratory and field, that show how human problem solving and decision making actually take place in a wide variety of situations. A number of theories have been
constructed to account for these data, and while these theories certainly do not yet constitute a single coherent whole, there is much in common among them. In one way or another, they incorporate the notions of bounded rationality: the need to search for decision alternatives, the replacement of optimisation by targets and satisficing goals, and mechanisms of learning and adaptation. If our interest lies in descriptive decision theory (or even normative decision theory), it is now entirely clear that the classical and neo-classical theories have been replaced by a superior alternative that provides us with a much closer approximation to what is actually going on.

But what if our interest lies primarily in normative political economy rather than in the more remote regions of the economic sciences? Is there then any reason why we should give up the familiar theories? Have the newer concepts of decision making and the firm shown their superiority 'for purposes of economic analysis'?

Source: Extracted from Herbert A. Simon (1979) 'Rational Decision Making in Business Organisations', The American Economic Review 69, pages 493513.

We do not deal further with Type B models today. Type B more or less disposes of most current economic theory and seeks new explanations from management science. In particular, Type B leads to a focus on what has been known since the 1950s as 'organisational behaviour'. This is a name for a number of disciplines which look at how decisions are made within the single organisation. Economists who use Type B models are sometimes called 'behavioural economists'

Instead, we concentrate now on Type A. In particular, the model known as Transaction Costs Economics. There are other models, known as managerial economic models, which analyse firms which attempt to maximise sales, or maximise growth, or seek to raise share prices for shareholders etc. However, the one with greatest influence on current economic research in the agrifood system, and of importance in developing countries, is the transaction costs model.

## 2. THE NATURE OF TRANSACTION COSTS

Here is a definition.

- Transaction costs are the costs of making an exchange. These are difficult to quantify because they differ according to the information available and the personalities of the economic agents involved.

Because of this, they are rarely calculated. Rather they are used in an 'awareness' way. So, in what follows, do not be too concerned about how to go about calculating transaction costs. Focus on understanding how their importance can be judged and how they can be incorporated into a neo-classical model, for that is our intention here.

Transaction costs are the costs of doing deals, of doing business, of making a sale, of exchanging goods for money, of completing a purchase, of closing a contract. Whenever any exchange takes place, there are transaction costs. Even in a firm, transaction costs can arise. If one part of the company sells vegetable oil to another part which makes bottled cooking oils for instance, as happens in Unilever, there are internal costs of the transaction.

Some companies use 'outputting'. For instance, Toyota of Japan (vehicles) and Benetton of Italy (clothing) both use numerous suppliers who are outside the company to produce components for the final product, instead of operating their own factories. For a long time, Mauritius was famous for importing textiles and making them up into finished cloth and clothing for export. All such transactions incur transaction costs. As we see later on, the agrifood system has many similar examples.

In Transaction Costs Economics, transaction costs are often divided into groups such as these.

- Information costs; finding out what is available in the way of potential customers (from the seller's side) and suppliers (from the customer's side); what are the current prices for different product offers, and what sort of exchanges are being made.
- Negotiation costs; having found someone to do business with, who is honest and seems to have the right to exchange what they hold with you, there are the costs of agreeing a contract. This could be as simple as saying 'I will have 1 kilo of tomatoes and pay the price displayed, thank you'. Or it could be a complicated written contract setting out details of product specification, timing, delivery, payment terms, and other clauses. Plainly, the more complicated the negotiations, the higher the transaction costs involved.
- Monitoring costs; making sure the contract is adhered to. If the contract is broken by one side, there has to be some way of policing the contract and enforcing the claims of one side against another. Again, if one of the tomatoes is bad, you can simply reject it; if a complicated written contract is broken, you may have to go to court to seek redress and compensation. These are the costs of monitoring the agreement.
- Asset specificity costs. This strange-sounding term simply means capital costs undertaken in order to make a particular exchange. For instance, a farmer may be required by contract to invest in improved equipment before he can supply a processor. Without the agreement, he would not undertake the investment, so the opportunity cost of the investment is part of the transaction costs.

Note: Economists often look at the first three as the 'transaction costs' and deal with the fourth separately because it is so specific to circumstances.

Try this question, to see if you have grasped the idea.

* Can you think of examples of information, negotiation, monitoring and asset costs when,
- a shop-keeper buys a truck-full of melons?
- a cheese-maker orders a daily supply of milk?
- a slaughterhouse buys cattle at an auction?
- a consumer buys a sack of flour from a village market?

I hope you can see that in these cases transaction costs vary not only according to the nature of the exchange, but also according to the personalities involved. Two different people would have different transaction costs. In the extreme, imagine the seller has recently gone blind and the prospective buyer is deaf! No other costs measured by economists vary with personality.

There have been a number of attempts to measure transaction costs in agrifood systems, including one by Stephen Jaffee of horticultural exports from Kenya, one by Rupert Loader of potato exports from Egypt, and one by Jill Hobbs of Scottish abattoirs buying cattle. In these and other research, what is evident is the amount of detailed enquiry needed, and difficulty of actually pinning down what costs are involved in a particular transaction. At the end of this topic, we will show you how you can use transaction costs as a useful analytical tool to understand changes underway in the agrifood system of your own country (see section 7 and the associated appendix).

## 3. THE ASSUMPTIONS AND HYPOTHESES OF TRANSACTION COSTS ECONOMICS

Four theorists in particular are associated with the development of transaction costs economics: a Briton, Ronald Coase (economist), and three Americans, Oliver Williamson (lawyer), Douglass North ( economic historian) and Herbert Simon (industrial psychologist). Three of them have won Nobel prizes for their work in this area.

We have already discussed one of Simon's contributions, the idea of 'bounded rationality'. The first economist to draw attention to transaction costs explicitly was Ronald Coase, like Simon, at the University of Chicago. Coase wondered why, if markets were such an efficient mechanism, were firms so big? The neo-classical answer was that it was a function of economies of scale and the adoption of new technology. Coase was unconvinced and instead proposed that the reason was high transaction costs in markets.

He hypothesised that economic agents, particularly managers of businesses, would always use the method of exchange which minimised transaction costs. If these costs were low on markets you would find many small firms exchanging with each other across markets. If these were high in markets, firms would exchange within themselves, i.e. firms would expand and incorporate more and more activities within
the firm. In the jargon, they would integrate horizontally (taking in similar activities) or vertically (taking in sequential activities).

Thus, in the agrifood system, where firms are growing bigger and sectors of the industry more concentrated, Coase would expect this to be caused by rising transaction costs in the markets for agrifood products.

In this way, Coase suggested the size of firms and, therefore, the number of market exchanges needed in the production of a given number of goods was determined by the level of transaction costs. This is illustrated in the next extract, taken from his Nobel prize address. Note the distinction between market pricing one the one hand and 'the allocation of resources by administrative decisions' on the other.

## Box 2: The Roots of Transaction Costs

I found the answer by the summer of 1932. I was to realise that there were costs of using the pricing mechanism. What the prices are have to be discovered. There are negotiations to be undertaken, contracts have to be drawn up, inspections have to be made, arrangements have to be made to settle disputes, and so on. These costs have come to be known as transaction costs. Their existence implies that methods of co-ordination alternative to the market, which are themselves costly and in various ways imperfect, may nonetheless be preferable to relying on the pricing mechanism, the only method of co-ordination normally analysed by economists. It was the avoidance of the costs of carrying out transaction through the market that could explain the existence of the firm in which the allocation of factors came about as a result of administrative decisions (and I thought it did).

If we move from a regime of zero transaction costs to one of positive transaction costs what becomes immediately clear is the crucial importance of the legal system in this new world. I explained in 'The Problem of Social Cost' that what are traded on the market are not, as is often supposed by economists, physical entities, but the rights to perform certain actions and the rights which individuals possess are established by the legal system. While we can imagine in the hypothetical world of zero transaction costs that the parties to an exchange would negotiate to change any provision of the law which prevents them from taking whatever steps are required to increase the value of production, in the real world of positive transaction costs, such a procedure would be extremely costly and would make unprofitable, even where it was allowed, a great deal of such contracting around the law. Because of this, the rights which individuals possess, with their duties and privileges will be to a large extent, what the law determines. As a result, the legal system will have a profound effect on the working of the economic systems and may in certain respects be said to control it.

Oliver Williamson has ascribed the nonuse or limited use of my thesis in 'The Nature of the Firm' to the fact that it has not been made 'operational,' by which he means that the concept of transaction costs has not been incorporated into a general theory. I think this is correct. There have been two reasons for this. First, incorporating transaction costs into standard economic theory, which has been based on the assumption that they are zero, would be very, difficult, and
economists who, like most scientists, as Thomas Kuhn has told us, are extremely conservative in their methods, have not been inclined to attempt it. Second, Williamson has also pointed out that although I was correct in making the choice between organisation within the firm or through the market the centrepiece of my analysis, I did not indicate what the factors were that determined the outcome of this choice and thus made it difficult for others to build on what is often described as a 'fundamental insight.' This also is true. But the interrelationships which govern the mix of market and hierarchy, to use Williamson's terms, are extremely complex, and in our present state of ignorance it will not be easy to discover what these factors are. What we need is more empirical work.

Source: Extracted from R. H. Coase 'The Institutional Structure of Production', American Economic Review, 82 (4), pages 713-720.

Note the primacy Coase gives to the legal system and how rules underpin the market system. As Coase ruefully admits, he founded less of a theory, more of a 'fundamental insight'!
'Bounded rationality' gives an upper limit to the size of the firm. Over a certain size, people within the firm cannot make rational decisions because the information required is too great; they are bounded by the sheer size of problems. As knowledge within the firm gets more and more bounded, so internal transaction costs rise, and managers start to use markets rather than the firm. Thus there is a natural limit to the size of firms. But what determines the minimum size of the firm? Neo-classical economics uses the idea of minimum average costs of production and assumes zero transaction costs. The transaction costs economist uses the idea of 'opportunism' suggested by Williamson.

## Oliver Williamson

Williamson is a Harvard lawyer and mainly responsible for taking the ideas of Simon and Coase a step further. He is a lawyer, so tends to ignore the Type A, Type B distinction (perhaps 'equilibrium' is of no particular concern to lawyers?). He suggested that bounded rationality together with opportunism were the two key elements which determine whether exchange takes place inside or outside the firm. He speaks of 'hierarchies and markets' and counter-poises these two modes of exchange. By hierarchy he means an organisation of some kind. Others use the term 'institutions'.

Opportunism is the tendency for economic agents to take advantage of whatever opportunities present themselves, whatever the agreement made. So a market agreement will be broken as soon as one party sees that the benefit of doing so is greater than the penalty. Some opportunities are dishonest. You get on a bus or train and reach your stop before someone comes to collect your ticket or money, so you seize the opportunity of a free ride!

Some people dislike this view of human nature, objecting that agents have moral values which will stop them behaving opportunistically. However, Williamson argues that there only has to be the potential for opportunistic behaviour to exist for people to
be wary of doing business. Thus it will always be worth doing some exchanges within the firm whenever markets are viewed as unreliable. This provides a reason for a minimum size of firms based upon transaction costs, because the greater the potential for opportunism, the higher the estimated transaction costs outside the firm.

Now ask yourself this question, and see where you stand.

* Do you think firms have moral values?

I think it depends partly on the owners of the firm. If the owners just want as much profit as possible, the firm will not perhaps be very 'moral': What is your view? Let us move on to the fourth and last major contributor we consider here, North.

## Douglass North

North's contribution has been to relate transaction costs to the development of institutions. An institution is simply a way of doing things. A market, a law, a statutory body, a firm, a charity, a club, all are institutions. Anything made by man that influences economic behaviour is an economic institution. North's hypothesis is that economic institutions are invented to overcome transaction costs.

This is easiest to see by considering how an economy develops over time. I am sure a writer such as Marx would have used transaction costs in his analysis of the evolution (and revolution) that characterises the development of society from subsistence to a modern industrial economy - if they had been 'invented'!

The basis of growth and development is specialisation, but this requires exchange. At first transaction costs are high, and inhibit exchange and therefore specialisation and hence growth. People seek ways to overcome, or avoid these high transaction costs, and as they do so, markets and firms blossom. The way they reduce transaction costs is by creating institutions.

As transaction costs decline, so markets emerge. But that is not all. There are many forms of market, and the transaction costs approach will predict that, other things being equal, exchange will be through channels with the lowest transaction costs. You might wonder, is there a single, identifiable, evolutionary trend in the methods of exchange? The answer is probably no. Transaction costs are one, important reason for the choice of means for exchange, but by no means the only one. Managerial reasons, especially strategic ones, are also important. We look further at these here.

Turn from the page now and see if you can sketch how the evolution of an agrifood system can be described using transaction costs.

Have you tried? See if your approach is similar to mine, set out below.

## Poor, semi-subsistence, agrarian economy

Transaction costs are very high because information about other people and their products is very poor. Therefore households tend to rely on their own food
production; they store crops on the farm, grow their own seed, use household manure, and generally act in a 'vertically-integrated' fashion. Few if any markets exist. If you want something, you make it yourself.

Except for a few tax gatherers, money-lenders and traders, hardly any institutions exist to promote the use of markets and permit specialisation. Consequently, income levels are low and static. However, contact with outsiders is occasional and these lead to growing aspirations. Human nature takes over - people want to do better for themselves, have more money, progress.

## Developing agrarian society, with emerging towns and cities

Some transaction costs begin to fall, whilst others, the cost of more protection and regulation of property rights rise. Open markets take over from integrated peasant production/consumption. Some markets link the local to the international economy. Village markets and fairs create work for traders and the merchants who begin to offer credit and rudimentary banking services. A monetary economy develops. The rule of law is standardised and the judiciary expands. All types of information become more available and transaction costs fall, allowing further specialisation and growth.

Maybe $10 \%$ of the economy consists of firms, individuals, market officials and government inspectors who comprise a growing set of institutions which aim to reduce transaction costs.

## Productive farm sector and industrialising economy

Markets grow large and mechanical handling increases for agricultural commodities. Road and rail provide links between produce and markets. Processing and retailers still rely on these markets. Information is made more available. Mass media increase information about markets and other economic data - press, radio, TV. Extension services and commercial companies offer advice to farmers. More young people are educated and are able to move into supervisory positions in the agrifood industry. Property rights to land become formalised and the basis for borrowing. A growing body of commercial law regulates employment, contractual arrangements, the supply of goods and services, and such matters. Taxation increases to pay for expanding health and education services.

However, the widening economy means buyer and seller do not know each other, and intermediaries spring up. The scope for opportunism rises. Also information is better, but much more is needed. So the growth of the economy increases transaction costs.

As a result, more of the economy is devoted to reducing transaction costs.

## Agribusinesses dominate farm supply, with highly concentrated and competitive processes and retailers

This is the scenario we discussed at the start of Unit 1. Try to write it down first (and cover up the text below!)

Consumer demand becomes more sophisticated, varied, fragmented. Retailing becomes concentrated among a few firms which form chains of supermarkets and differentiate the products they sell. The transaction costs of obtaining these newly differentiated products are higher than the transaction costs for the old basic products. Products such as plain cooking oil, milk, bread and eggs give way to low fat mayonnaise, chocolate mousse and sized, brown, free range eggs. As a result, transaction costs favour more internal and less external exchanges.

The pendulum swings back to inside the organisation and away from the market. However, because food retailing and processing and farming are such different businesses, each remains separate. Instead of vertical integration, there are partnerships. Open markets decline, dealing with lower volumes of non-standardised product. Vertical chains of partners, involving retailer-processor-farmer - even farm input supplier, emerge. Competition is more and more between chains of businesses, rather than individual firms. Transaction costs are low for market trading, but final demand has changed, and is now highly specific for particular parts of the consumer market. Finding exactly the right grades and volumes is expensive using uncoordinated exchanges.

In the economy as a whole, perhaps $25 \%$ of all activity is now aimed at reducing transaction costs. Examples include commercial lawyers, accountants, financial advisers, bankers, insurance companies, market analysts, business journalists, advertisers, consumer advisers, government departments, etc., monitor and regulate markets and industries and trade. All these and more aim to reduce the friction in markets and bring producers and consumers closer together.

## Completely integrated and industrialised economy: a mass of differentiated products

This has not arisen yet, but when/if it does, what will it look like? Some suggest a 'Post Modern' society with society fragmented into groups. One suggestion is a ' 20 -$40-40$ ' society. At the top, $20 \%$ skilled and lucky workers on high incomes, then $40 \%$ with simpler skills, and $40 \%$ at the bottom relying on welfare and income redistribution from the top.

In such a society, some argue, there will be many small firms, because computers will make transaction costs very low, and permit diffused economic systems. A few factories will produce in a capital-intensive way and the physical production and distribution of goods will only employ, say, $10 \%$ of the population. With $40 \%$ unemployed, the remaining $50 \%$ will be engaged in two sorts of service industries: health, education and tourism on the one hand and transaction costs reducing services on the other.

* Can you see what happens once, with everyone on the internet, a world legal code readily enforced and instantaneous language translations available, transaction costs fall to zero?

There are no more firms, just a web of interacting economic agents earning and spending money. In a way, what has brought the world of Coase a step nearer is the
micro-chip revolution. Interestingly, transaction costs were of little interest before the microcomputer revolution began in the 1980s!

North interprets this kind of historical process as follows. In order to overcome transaction costs, institutions are created which gradually create a pattern If these institutions are growth-oriented and economically benign, the economy is set on a path of growth and prosperity. If institutions are growth-inhibiting and malign to economic development, the country will stagnate. North speaks of whole economies, but the logic applies equally well to particular sectors, like agrifood.

## 4. SUMMARY SO FAR

You are perhaps feeling confused by all this! Be patient, we are going to look at some real world examples. The confusion is not your fault, it is the result of being in the midst of a paradigm shift. A shifting paradigm means not everyone is talking about the same thing, and bad ideas co-exist with good. In this section, we summarise the discussion so far.

## Traditional or Neo-classical economic models

## - assumptions

- rationality and maximising behaviour
- perfect knowledge and no transaction costs
- equilibrating markets, thanks to the law of diminishing returns
- hypotheses
- under conditions of perfect competition, which hold when the assumptions are met, plus there are many buyers and sellers, and free entry and exit, the welfare of society and the efficiency of the economy are both simultaneously maximised by the operation of unimpeded market forces
- when perfect competition is not established, there will be costs to society and efficiency costs to the economy


## Type A model, transaction costs economics

- assumptions
- same as neo-classical, but with an awareness of bounded rationality
- imperfect knowledge, but enough knowledge for markets to work
- the law of diminishing returns holds and there are still strong forces tending markets towards equilibrium
- transaction costs exist whenever an exchange takes place and the costs affect the nature of the exchange
- hypotheses
- that economic agents will attempt to minimise transaction costs, other things being equal
- that they do this by inventing institutions to reduce transaction costs. These include creating partnerships and alliances, making contractual arrangements for long term supply, and dealing on futures markets
- over time, an economy will build up an assortment of institutions which themselves will feed back on the process of specialisation and change

Thus a slow growing economy, a poorly performing agrifood industry, is the result of a poor set of institutions, and until these are reformed, progress will remain elusive. On the other hand, a fast growing agrifood industry will be the result of a set of institutions which favour growth and development.

## Type B model, behavioural economics

## - assumptions

- economic agents are satisficers not maximisers so no longer 'rational' in the neo-classical sense
- they operate with imperfect knowledge
- there is no tendency to equilibrium in the system


## - hypothesis

each business and organisation, and each decision can only be understood in its own terms; there are no general rules which allow outcomes to be predicted

As you can see, there is a lot of room for clarifying the differences between these models, and probably that will happen over the next few years. Until then, make sure you specify clearly what your own assumptions and hypotheses are when making an economic argument.

From here on we only consider the Type A model of transaction costs economics.

## 5. TRANSACTION COSTS AND SUPPLY CHAIN MANAGEMENT

Transaction costs economics, as developed from the ideas of Simon, Coase, Williamson and North, predict that if in a sequence of operations, such as the agrifood system, transaction costs are high in markets, then firms will integrate vertically and internalise exchanges. However, this has not happened much in the agrifood industry (nor, for that matter in many industries). Instead, as we saw in phase 4 of North's sequence above, there has been a growth of a 'half-way' form of integration. This is the development of partnerships and contractual obligations between companies. Instead of the supply chain for, say, bread, being composed of either a series of independent firms, selling wheat, then flour, then bread, on open markets, or one big, integrated firm, an 'in-between' arrangement is made. Farmers contract to provide wheat under specified conditions to the millers. They make arrangements with breadmakers, who make arrangements with retailers.

When this happens, we say that the supply chain has become 'managed'.

Try this question next.

* Why do you think supply chain management might suit the agrifood industry?

Each stage is very different from the others, and requires different mixes of resources, knowledge and skills and has different kinds of risk. Therefore, the activities are more efficiently organised in different firms. However, there is a strong common interest in seeing a food supply chain work with low transaction costs, so the firms agree to collaborate in managing the chain.

* Can you say why managed supply chains arise using transaction costs reasoning?

As demand becomes fragmented, and consumers wants more diversity; also, as retailers use product differentiation as a marketing strategy, so transaction costs on open markets rise. To avoid these rising transaction costs in a well-ordered society, people will invent a new institution, such as a partnership agreement. In one country the agreement may be a verbal agreement, or the shake of a hand. In another country the agreement may be a written contract authorised by a lawyer.

* And why does full integration along the supply chain not take place?

Because the integrated firm that resulted would suffer from bounded rationality and would find itself inefficient at trying to manage several very different types of business. Also, what would it do if the supply of wheat from its farms was too little or too much for the mill, and if the mill's flour supply was too little or too much for the bakery, and if the bread produced was too little or too much for the shops? The planning and co-ordination within the integrated firm would mean transaction costs were higher within a single firm than in a managed supply chain.

As we saw above, bounded rationality means that management costs will rise as the firm becomes more complicated. For instance, the accuracy of information flows within the company will decline and inefficiencies rise.

Note the use of the word 'partnership'. In practice, power is not equally shared in a supply chain, and one firm will have most say in the management. In marketing, this leading firm is sometimes called the 'supply chain captain'. A 'partnership' may mean a happily married couple, or a master and slave! (Of course, what one partner sees as a happy marriage, the other can see as slavery, so you need to get the views of both sides in a partnership!)

There are many and varied partnerships in the agrifood industry. Do you know of any examples where you live? Are they based on legal documents and policed by inspectors and regulators? Or are they based upon a shake of the hand and nod of the head?

[^0]If I buy wheat on the open market, making a contract to buy there and then, I do not have to know and make a lasting relationship with the seller. In a partnership, the relationship is for the longer term. Firms look for other firms they can trust, who do business in the same ways as they do (what a marketing specialist calls a good 'fit'), and with whom transaction costs are low. If things go wrong, the partners will want a simple telephone call to sort it out and re-start supplies moving, not a long and expensive court case.

Here's a question to test if you have understood the reasoning above.

* What stops partnerships from forming?

A number of personal and organisational factors are needed to make a partnership work well, notably a high degree of trust. Partners cannot rely on the law courts to resolve differences, especially with a perishable product like food except at high cost in legal fees (i.e. high transaction costs). If partners are too rigid, transaction costs will be high. Where trust is absent, one or both partners will be tempted to cheat, or switch from the partner to others in order to make a short run gain. As we note above, Williamson argues that, 'The potential for opportunistic behaviour' provides a brake on the formation of new partnerships and the survival of old ones.

## 6. TRANSACTION COSTS AND CORRUPTION

Another point to make before looking at examples of transaction costs is with regard to corruption. Where markets do not work competitively, it is often found that officials become corrupt and demand bribes. Thus, if there is only one road from the processor to the market, a military road block is a very visible sign of transaction cost! In some countries, organised crime has become famous for its ability to monopolise trade and then extract bribes which count as transaction costs.

What brings corruption to an end? A moral crusade is one way. More likely, when competition starts to make it impossible to control all the supply routes, the corrupt officials who hold the trade by the neck lose their power.

So, a corrupt economy is one with high transaction costs. Supporters of corruption, and there are some, argue that it is in the interest of the corrupt official to take a bribe, but not to kill off the trade altogether, so corruption is a sign that at least some economic activity is under way. Nevertheless, the economy is prevented from developing markets and hence specialisation so long as bribery and corruption are endemic.

- There are examples where corruption can lower transaction costs. Can you think of any?

In some countries, traffic police take bribes from motorists who would otherwise bear the costs of going to court for traffic offences. This corruption lowers transaction costs.

In the next section we look at some Case Studies. Try a few of these and find out how far you can now use your knowledge of transaction costs to analyse changes in agrifood systems.

## 7. CASE STUDIES

This section is designed to be read in conjunction with the seven case studies provided in the appendix. These studies are drawn from agrifood systems around the world and are employed to illustrate the use of transaction costs. Choose whichever you like and read through the extract. Then try the questions in the text. After doing two or three case studies in this way, you should be in a good position to use transaction costs as part of your analysis of the agrifood system in your own country and commodity specialisation. The first 3 studies are dealt with in greatest detail, to help you get the idea, so it is recommended that you start with one of those.

Several of the studies are from developed countries. This reflects two things. First, the much greater activity among food companies in developed world. Second, the greater availability of case study material relating to countries with a highly developed agrifood system. Using these studies also avoids the danger of making unjust judgements upon individual developing countries on the basis of one magazine article.

Most of the cases are extracted from newspapers and magazines, so the English may be a bit 'racy' at times. Don't worry if you cannot understand all the words used; the meaning is generally quite clear from the context.

A few general lessons emerge from the studies - see if you can spot them. First, there seems to be a definite connection between lowering transaction costs and creating new institutions, particularly partnership agreements. Second, the development of new marketing channels with lower transaction costs also affects production costs. Third, modern developments in retailing require new institutions in order to avoid the high transaction costs of obtaining supplies.

## Case Study 1

Having read the case study, try this question.

* Can you relate the author's idea for 'Marketing hubs' for British growers to the lowering of the various types of transaction costs?

Plainly hubs should improve the flow of information to smaller British growers. Also, negotiating quality specifications is standardised, so negotiations are less costly. Monitoring costs should also be lower. The extract does not mention any extra investment, so asset specificity costs are not an issue here (if you have forgotten what these are, look back to the start of today's material).

Try another question.

* What new institution does the author propose to enable transaction costs to be reduced? Is there an alternative in the extract?

The author proposes the hub. The obvious alternative way of reducing transaction costs is to copy the Dutch and encourage co-operatives of growers to use auction markets. The author does not make a very strong case in this piece for not doing so, but we might suspect it is because the mix of large and small growers in Britain is a poor breeding ground for the Dutch system! Alternatively, perhaps the modern agrifood system has become too complex even for an auction system as efficient as that in the Netherlands. What do you think?

Can you see how transaction costs gives us a framework for arguing about such issues (how to market fresh vegetables)? This is its main justification. Few researchers are ever actually going to measure transaction costs! Who would believe them if they did?

* Do you think transaction costs might be raised in any way by creating marketing hubs?

It depends upon how well the large and small growers get on. At the end, the writer emphasises the need for commitment and trust, yet still within a competitive environment. Also, we need to know about asset specificity. If the hubs require a lot of investment, that could be called a transaction cost of the 'asset specificity' variety.

Next, think about the type of contract growers should make with a newly created hub.

* Do you think small growers should sign a commitment to deliver their tomatoes to the hub whatever the structure of prices?

No. The writer makes clear that the hub must offer competitive prices. Small growers use the hub because it is the best supply channel, not because they promised to support it.

* Finally, into what category of economist would you put the writer unreconstructed neo-classical, Type A transaction costs or Type B behavioural?

The author reads like a Type A adherent (in this article at least). Neo-classical ideas are there; not the use of supply and demand as determining prices at the hubs and at the Dutch auctions. She does not mention transaction costs but as we note above, they are there, and the aim is to reduce them. The hubs also aim to reduce other costs, such as logistics.

## Case Study 2

Here the subject is Baskin Robbins ice-cream, setting up in Russia in 1993. The problem was, how to obtain a reliable supply of high quality milk in circumstances where milk producers had undertaken very little investment in milk quality. The article describes how the makers of Baskin Robbins, then owned by Allied-Lyons plc, solved the problem.

The article gives a striking account of opening up a Western business in Russia in the early 1990s. A lot of the statements ascribed to Mr Kadenacy are obviously rapid answers to a journalist's questions, so we cannot hope to dissect each point made, nor hold the gentleman to what the article said!

Try this question to start with.

* It is clear all costs are high, including transaction costs. What is the main approach to lowering these?

The approach seems to be to employ a rough, tough businessman who can deal with a lot of friction in the economy. They obviously chose the site of the new plant with care, since the manager of the existing plant, Mr Abramyan has been 'invaluable in opening doors and helping us get on'.

* $\quad$ Are there any new institutions created?

Two are mentioned. The first is the joint venture between Khladokombinat No 9 and Baskin Robbins. The second is the partnership agreement with Mr Koztov, the dairy farm manager, and the dairy plant in Mozhaisk, which will be one of three dairies to supply the ice-cream plant. Clearly, each dairy will have a number of such partnership agreements.

* Any new institutions coming later?

The one mentioned is a 'national sales network' for the main cities, and 'a franchise network' for more remote areas. Also, it sounds like there will have to be an animal health and hygiene improvement service, so this may require a new institution, for instance a new subsidiary, veterinarian company set up.

* The planned development is ambitious. How might 'bounded rationality' limit the spread of Baskin Robbins, and what steps can the company take to over come it?

Rather than try to buy these services on markets, it may be better to create them incompany. What do you think? This sounds like a tricky one.

* Why do you think Mr Kadenacy can afford to ignore the pleas of dairy farms for money to invest in new technology?

First, the company is offering a $25 \%$ premium on the milk price to farmers. Second, the company is helping 'selected farms' apply for grants. The word 'selected' is interesting. Maybe in the long term, the company will limit milk purchases to improved dairy farms, and stop buying from the rest.

Can you relate this to transaction costs?
Mr Ashrapov, the dairy farm manager, obviously disagrees about the need for finance. This suggests there will be continued negotiating costs in the partnerships between farmers and dairies. Opportunism may also become a problem, if the farms see alternative channels for their milk which do offer more chance of obtaining finance.

## Case Study 3

This case study is drawn from Britain. A snacks company has been successful in the home market and decides to expand into exports. However, the first attempt fails. A second attempt using supply chain management techniques proves successful.

Snack foods are something which vary with the country concerned. In Japan and the Pacific Rim, a variety of processed and fresh snacks are consumed, but the abundance of street food from stalls inhibits the overall size of the market for packaged and advertised snacks.

This study is about the European market, so a few words to give you some context on this.

In northern Europe, two snacks dominate the market; potato crisps (chips to Americans) and salted peanuts, with some strong segments (that is sub-sectors) of the market:

## - hungry children

- drinkers who want something to help the beer slide down!
- people watching sports, at the cinema and other entertainment

In southern Europe, packaged snacks are relatively new and traditionally baked and cooked snacks are still eaten. Snack companies from northern Europe, facing competition in static markets at home, are looking south. To do so, they can either sell direct to retail outlets and restaurants, or seek partnership arrangements with local firms to distribute on their behalf.

* Why might they prefer to market themselves?

To 'cut out the middleman' perhaps. Or in a new market, the processor does not know which distributor to trust.

* What are the advantages of using a local distributor?

They know the market, are present all the time, so retailers know where to come to complain or change their order, and can provide the processor with good information on what the local market wants, the strengths and weaknesses of competitors and so on.

* Can you see why the first attempt, in the 1982-88 period failed to establish sales abroad?

Poor management skills ('Mickey Mouse'), fragmented markets abroad, particularly distribution systems, and the need for a country by country approach.

* What transaction costs were involved?

In France and Germany there were many buying points, each of which involved transaction costs.

* Was the choice of partners always good?

No, in Germany, the tobacco distributor failed to perform well for the snack company.
This example shows how important the management of the supply chain can be. Each market needs different flavours and a partner able to market the product. Note that production costs and prices, and levels of production are not mentioned as noteworthy.

## Case Study 4

This study comes from Europe and concerns the impact on a market when transaction costs fall as a result of retailers forming alliances to buy in bulk from processors. See if you can work out how to explain this. Remember throughout that whatever the conflict over prices, supply chain participants are united in their interest to serve customers as well as possible. In this case the alliances improved markedly the information available. If a processor tries to maintain different prices in different countries, an alliance can use 'trans-shipments', as you can see from the article.

Once you have read it, try this question.

* Do you think such alliances will start in other parts of the world?

It seems unlikely because in western Europe there are around 20 high income countries each with a few large retailers who have to date operated mainly within one country. Retailing is not an easy activity to transfer from one country to another because taste and shopping habits differ a lot. In western Europe, national tastes differ, and the same branded food often tastes different according to the country in which it is purchased. However, dietary patterns are fairly similar and, evidence suggests, are converging. Where else are these conditions found?

Also, in the early 1990s, when the extract was written, the agrifood industry was preparing for a further integration of the European Union into a single market in 1993. This encouraged a spurt in alliance-forming. There seems to have been less activity in this direction in more recent years.

If and when political boundaries also come down in Central and Southern America, Africa, the Middle East, South East Asia or the Pacific Rim, do you think retail alliances will emerge as institutions which can reduce transaction costs?

- The article suggests another reason for forming alliances besides transaction costs. Can you spot it?

Increased market power over manufacturers. The alliances give retailers the power to push down the prices they have to pay. This is a different argument for why retailers form alliances to the transaction costs one.

## Case Study 5

This example, is from Russia (a good place to look in the 1990s to see how business tries to overcome high transaction costs). The article describes the way American grain traders constructed a grain contract to use in Russia. The mid-western United States and western Canada have long been in the forefront of creating new institutions to facilitate grain trading. Here, their expertise is applied to Russia.

Can you see how the contract is modified to take account of a high monitoring transaction cost in Russia - 'the high frequency of default' (paragraph 2)? High costs of information are revealed in paragraph 8.

Later on, the writers list 'prerequisites ... to further development'. The five points they recommend are all aimed at reducing transaction costs. What are they?

## Case Study 6

Here we look at an article about the growth of supermarkets in Asia. Of course, we must be cautious about accepting everything we read. Could supermarkets in Taiwan really go from $3 \%$ to $40 \%$ of the market in just 4 years? (It depends on what 'modern retailers' mean I suppose, but I suspect that the statistics are misleading; perhaps the way sales of groceries were calculated changed, and street market food was excluded?).

* Again, transaction costs are there, but not explicitly mentioned. 'Preferred supplier relationships’ sound like our old friends partnerships! However, do you think the convenience stores will look for partnerships rather than rely on open markets?

Small outlets will have higher total costs per item sold, so should be even more keen to reduce transaction costs than the supermarkets. Maybe they will form a buying alliance.

> * Which sort of businesses might be expected to continue to use open markets? What sort of problems will they face if the supermarket revolution really is proceeding at the Taiwanese supposed rate of about an average $12 \%$ market share per annum?

Small businesses, such as restaurants, corner shops and market stalls will want to keep using markets, but will farmers keep supplying the markets? If quality declines and prices become volatile and unpredictable, even small shops may want to form alliances to reduce transaction costs and ensure supplies.

## Case Study 7

The final study is about a Taiwanese multinational corporation, President Enterprises Corporation (PEC). The article paints a picture of a highly innovative company which seeks to reduce transaction costs in many ways. See if you can list the different methods it uses.

I think PEC lowered transaction costs in the following ways:

- Vertical integration - it invested in its own convenience stores. This meant it sold its food products within the company from processing to retailing levels. Transaction costs were kept low by taking on the 7-Eleven franchise, because this simplified what products it had to buy in, and how to sell them. The company also integrated into farming, canning, logistics and distribution, and financial services. It has opened its own instant noodle factories in China too.
- Partnerships - a number of joint ventures are mentioned.
- Mainland Chinese managers are being taken to Taiwan for training. This will lower negotiating and monitoring costs.

However, the article still sees areas of high transaction costs remaining. Can you see some examples?

- 'the mainland market is complex' and tastes very localised (making the costs of doing deals that much higher, particularly information and negotiating costs)
- We are told that Taiwan is banned from having direct links to the mainland.

This completes the case studies on transaction costs. As noted in the text, it is possible to go much further with time, money and patience, and estimate transaction costs empirically. However, for most people working in the agrifood system, transaction costs are more usefully regarded as a conceptual framework for understanding how the system changes rather than something to be calculated.

## Appendix on Transaction Costs: Seven Case Studies

## Case study 1: A useful lesson for British tomato growers from the Netherlands?

The first example is a typical problem in agrifood systems. Foreign suppliers are highly competitive and local growers seek ways in which they can hold on to their markets at home in the face of well organised imports. The problem arises mostly when import barriers have been reduced. This example is about British tomato growers seeking to compete with imports from The Netherlands. As GATT trade reforms come into play during the 1990s, this sort of problem will arise wherever supermarkets are an important part of the distribution system. Many working in developing countries will be familiar with the problems encountered. Note that the example (tomatoes in Britain and how growers can learn from their Dutch competitors) is of no particular interest, just the issues it illustrates.

Incidentally, the word 'logistics' means the process of handling, storing and transporting products. Logistics are part of distribution costs, sometimes called marketing costs in business. However, economists lumped them together with processing costs and called the sum 'costs of production'. At the risk of boring you with repetition, transaction costs are quite different! They are not included in costs of production.
'What is needed is a system which reduces the procurement cost of trade buyers in Britain relative to the costs of buying from The Netherlands, but which preserves close contact with growers. In earlier work the Strathclyde University Food Project concluded that the British market has to be made more transparent and knowledge must flow more freely (Shaw et al 1993). Mechanisms are needed which give better information to customers about the availability of British supplies and to suppliers about retail demand. Mechanisms are required which ensure that available supplies of the first class product demanded by the retail sector do in fact go into that sector, instead of the retailer turning to The Netherlands. Instead, what can happen at present is that product has to be sold on less profitable markets, perpetuating the cycle of low profitability in the industry, simply because retailers do not know that suitable product is available and are not prepared to incur the search costs of finding out.

It is here that networks which can use the co-ordinating role of the larger growers as a mechanism for assembling supplies for the retailers from other, smaller, growers can make a contribution. This is already done by some major tomato suppliers for some retailers to reduce the fragmentation of the industry for marketing. In essence what has been created are a small number of competing confederations of businesses, guided from a hub where key functions such as the management of information, the management of strategy, the development of customer relationships, quality control and research and development take place. Logistics are also handled from this central point in order to make the most effective use of transport and thus further reduce costs. The hub in each case is likely to be one of the major producers since they have a large initial pool of supplies, better marketing capabilities and research and development skills. The hub is supplied by smaller producers who concentrate on production, in which they
are efficient and they delegate marketing, research etc., in which they have a comparative disadvantage, to the centre. The system also offers advantages to the retailer. By allowing a dominant supplier to organise supplies throughout the growing season, the retailer's sourcing costs are reduced, as are their costs of product inspection. The latter are now largely left to the responsibility of the dominant grower. This system has the advantage over traditional forms of cooperation in that it provides a means of reconciling the different interests of large and small producers, often a problem with a formal co-operative. It also allows collaboration between businesses with very different ownership structures.

This practice is not universal and there is considered to be considerable scope for further co-ordinated activity among growers. In many cases retailers still deal with large numbers of suppliers, switching during the season as availability changes from grower to grower or they use, as indicated earlier, the Dutch auction market. It is however, an alternative form of supply chain collaboration which has received little formal recognition.

The centre of the hub must have some kind of assurance of continuing supplies from the spokes of the hub, particularly if investment is required which is dependent on the hub as a whole for viability. The small producer must see benefits to compensate for the loss of autonomy. In particular the small producer will seek reassurance that they are not treated as a marginal supplier by the centre of the hub, to be used when demand is strong but abandoned in times of weaker demand. They will require assurance that they will be able to participate in innovation by the centre. To reconcile these potential conflicts requires internal marketing cultures within the network which are co-operative rather than competing and reward systems which are seen to be equitable.

The success of this type of relationship requires high levels of commitment and trust on both sides, but at the same time, both the centre and the hub operate within a framework of commodity type competition. The marketing hub cannot afford to offer the smaller suppliers terms which leave it out of line in its price offer to its major customers. Nor can the small suppliers ignore a situation where better terms are offered elsewhere. The marketing hub has to discourage retailers from opening direct supply lines with smaller members of the hub, while encouraging supplier participation in the hub.'

## Source: Taken from Susan Shaw (1994) Proceedings of the Agricultural Economics Society Conference, Exeter, April 1994

## Case study 2: Setting up a foreign ice cream business in Russia

This is from a newspaper article. Russia went through enormous changes from 198993 , the period discussed in this article. Not only was the old economy destroyed and a new one created without any planning, but also the old Soviet Union fragmented into 15 separate countries, raising transaction costs immensely. The death of the old communist-inspired institutions meant that food hygiene regulations and veterinary inspection services fell apart across the country. Consequently, this ice cream company found it had to create institutions from scratch. An interesting and
impressive story, both for the perseverance of the foreign company and the ability of the Russians to cope with an economic whirlwind!

The article is written in a racy style - be warned!
'As a Vietnam war veteran with 85 airborne missions under his belt, Michael Kadenacy was not going to let a line of T-S0 tanks stop him doing business on the streets of Moscow. Having spent a day in his large, luxurious apartment listening to the sound of gunfire, he broke a promise to his wife Victoria to keep his head down and ventured outside with Slava, his ever-ready driver.

The brief excursion, past the burning White House parliament building and across the New Arbat bridge, was to check on the fate of one of the street kiosks which Mr Kadenacy is opening across the Russian capital. Given the limited extent of the fighting between parliamentary rebels and the army, his kiosk was intact and still open for business.

The increasingly familiar, purple and white cabins are selling 'America's favourite ice-cream' to appreciative Muscovites now eager and able to buy an expensive, creamy treat crammed with nuts or chunks of fruit.

Sunshine or snow, Russians have always liked ice-cream; now they are buying the 'real thing' from kiosks and stores on Peace Street and Pushkin Square. The tasteless, iced-milk alternative manufactured locally is yesterday's news.
'America's favourite' is made by Baskin Robbins, a subsidiary of Allied-Lyons, the UK food and drink group. As managing director of Baskin Robbins Eastern, Mr Kadenacy - 6ft 6in in his sable fur hat - is Moscow's ice-cream king.

Since March this year, the 55-year-old English-born, US-trained lawyer who got bored after 20 years in the California fast-lane, has been based in the city where it takes a month to get a delivery truck registered.

At present, 100000 gallons a year of cherry jubilee, tiger tail, almond fudge and three dozen other flavours are being flown in from Canada to be sold from 70 kiosks and stores in Moscow, St Petersburg and Novgorod.

When Mr Kadenacy's mission is complete, 2 million gallons of ice-cream a year should be slipping down the throats of customers at 800 outlets stretching from St Petersburg to Rostov. Eventually, he expects sales of 8 million gallons.

Since being appointed managing director of the Russian business in 1991, the singleminded corporate lawyer with a passion for good food and baroque music has been tackling a string of daunting logistical, commercial and personal challenges.

Colleagues say he was made for the job. According to one: 'He's a tough son of a bitch and hangs on like a bulldog. He gets things done.'

Anyone attempting to do business in a market without a commercial infrastructure or the skills needed to create a consumer revolution is likely to share Mr Kadenacy's
frustrations. Not all of them will agree with his upbeat philosophy: 'Every problem here means an opportunity. The Russians are seriously underestimated; the future is going to be good.'

He has complaints: 'Most Russians live day-to-day and hope time will take care of everything; it made sense in a country where no one knew what tomorrow would bring but it means there is no long-term view.'

Of the countless bureaucrats who still make progress difficult, he adds: 'Some are learning fast but others are rigid and stupid; sorry, arbitrary and capricious. A generation will pass before the bad old ways are forgotten.'

Since abandoning efforts to run the business from London, a priority has been the construction of a $\$ 30$ million ice-cream factory close to the Ostankino television centre. To help him he has a Moscow staff of 31, predominantly Russian, although turnover is high because employees are anxious to move on and advance themselves.

The ice-cream plant - being built in a joint venture partnership with an arm of the Russian ministry of trade, now reborn as the self-financing enterprise Khladokombinat No 9 - is on schedule to open in summer 1995. Local production will mean improved supplies and freedom from import duties, which do not yet exist, but which are seen as inevitable.

There have been many problems; building plans which failed to match a picture of a state-approved ice-cream factory in a yellowing, official manual were rejected. The joint venture partners ran out of money, leaving Baskin Robbins to raise its investment stake from $50 \%$ to $70 \%$.

A 'topping out' ceremony took place two weeks ago in a blizzard, attracting AlliedLyons VIPs from London. Mr Kadenacy slips into expatriate vernacular to dub them 'sea-gulls': 'They fly in, eat everything, shit on you and fly out.' Not that he objects: 'The more they come, the more they realise what we are up against.' More than once, the 'sea-gulls' have wondered whether to call off the whole project. But they have stuck with it and with Mr Kadenacy.

He has worked closely on the factory with Mr Yuri Abramyan, the stylish, immaculately groomed general director of Khladokombinat No 9 who helped guests demolish an extravagant celebratory lunch at the Russia hotel. Later, at the Bolshoi theatre for a performance of Giselle, they toasted each other with champagne. 'We have a good working relationship, even though we sometimes shout at each other. He has been invaluable in opening doors and helping us get on,' Mr Kadenacy acknowledges.

Whatever the legal requirements, Baskin Robbins believes a significant Russian component is essential if the venture is to succeed. 'It needs to be seen as a partly Russian enterprise and not just a case of foreigners plunging in. We are not here to dictate. The companies who arrive knowing it all don't stand a chance. This is no place for hot-shots?'

Also on Mr Kadenacy's plate is the creation of a national sales network, following the collapse of the state stores and distribution system. He has been on regular, investigative visits across a 2000 km swathe of Russia, and in January joins 'very supportive' British embassy officials on another fact-finding tour.

Beyond Moscow, St Petersburg and Novgorod, the plan is to expand sales via a franchise network, although much work is still needed on a distribution network in a country where middlemen used to be regarded as criminals.

Another huge challenge is maintaining the quality of the product: 'We want to exploit the fact this will be Russian-made ice-cream but it must be up to Western standards,' Mr Kadenacy stresses. The scale of the task is forcefully underlined by a visit to Mozhaisk, 130 km north-west of Moscow, where one of the three dairies which will supply milk to the factory is located.

Mr Valery Koztov, dairy manager, promises high-quality supplies from a shabby, 35-year-old plant now contractually obliged to deliver sweet, clean milk 'free from objectionable flavours and odours'.

He wants to keep his customers happy and to be profitable. But he knows his own suppliers will have to alter their ways: 'They must change their thinking, realise they are the owners and that they must help solve their own problems.' He grins and adds: 'In the West, five people look after 500 cows. Here, 500 cows need 500 people.'

The farms chosen by Baskin Robbins can expect a $25 \%$ premium on milk supplied. Mr Mikhail Ashrapov, the ruddy-faced director of nearby Borisovo farm, which in March converted from state-ownership to become a shareholding society, wears a broad smile. His 3600 cows have been chosen. In a dark, foul-smelling barn, dozens of cows eat methodically from troughs as women workers continuously clear away the by-product of their appetites. The milking machinery is archaic; hygiene measures appear rudimentary.

But improvements are under way and Baskin Robbins is helping its selected farms to win grants from wherever they are available. Bacteria control will even extend to agreement on the maximum number of udders to be cleaned with one rag.

Mr Ashrapov complains about lack of finance. Mr Kadenacy is unsympathetic: ‘The farmers think the answer to everything lies in more foreign money. But they also have to get off their butts and work.'

Is it all worth it? 'Absolutely. We can take all the hassle because this is going to be one hell of a market and eventually we can make very healthy profits.'

One kiosk operator got the message early on. Mr Kadenacy recalls: 'We couldn't work out why his sales were going through the roof. We checked up and found him handing out condoms to customers. With that sort of initiative, how can this place fail?'

Source: Michael Cassell, 'Ice-cream Tsar on the streets of Moscow' Financial Times, 8 November, 1993.

## Case study 3: Exporting snack foods

This article was also from a newspaper. The market for snack foods like crisps, chips, peanuts, tortilla chips has become mature in industrial countries, and manufacturers are trying to find new markets. This means in developing countries convincing consumers that their packaged, factory-made snack food products are 'better' than the traditional snacks served by street vendors and market stalls. Once consumers get a preference for packaged snacks, the developing country can find itself with a new and expanding type of import to pay for. If this is the situation in your country, the case study should interest you!
'Derwent Valley has developed impressively at home since its foundation in 1982, especially in its core market of south-east England. It expects total revenue for $1991-93$ of $£ 24 \mathrm{~m}$, and profits of above $£ 2 \mathrm{~m}$. Yet barely $£ 1 \mathrm{~m}$ of its sales are to continental Europe.

When, just over four years ago (i.e. 1988), the Financial Times last examined how Derwent Valley was preparing Fogg (the branch name of the company, Derwent Valley) for Europe's single market, the company's top managers were open about their past failings.

One of them described their then desultory export efforts as 'a Mickey Mouse operation'. This disarming self-disparagement is typical of the company's style, but was not entirely fair for two reasons.

First, its explosive growth in Britain left little management time to cope with the tricky problem of steering Fogg into continental Europe.

Second, the company had encountered the same problem which beset most medium-sized would-be exporters of consumer products within Europe: fragmented and sometimes impenetrable national distribution patterns. In most industries these represent a far greater barrier to the creation of a single market than do national and regional differences in consumer preferences. Even when national retail patterns seem superficially similar, the reality is often otherwise. France has a growing number of large chains, but their buying patterns contrast sharply with those in Britain. They are not only more fragmented, but buying groups purchase on behalf of odd combinations of retailers.

Even then, says Ray McGhee, Derwent Valley's marketing director, you still have to sell to individual shops, each of which levies a one-off charge for putting your product on its shelves. The company and its new French partner are spending £200 000 on this in 1992-93.

In Germany there is a complex mixture of delicatessens and specialist stores, plus large retail chains. The latter, unlike their British equivalents, have numerous buying points.

Under Roger McKechnie, the chairman and managing director, Derwent Valley decided in late 1988 to pause, lick its wounds, and start a thorough research and
planning exercise in order to prepare a real attack on the continent. 'We've decided the time has come to do things properly,' he said at the time.

It commissioned a consultancy study which, instead of proposing a marketing plan, as expected, 'concluded that we had a lot more preparatory work to do', McKechnie says. Throughout 1989 and 1990 the company and its consultants carried out consumer-research. This demonstrated great potential interest in the Phileas Fogg brand. But it also showed that the range of flavours would have to be tailored to each of them.

It uncovered, too, a need not just to do each country's packaging in its own language - at an initial cost of $£ 10000$ a product per country - but also to design a distinctive shape of package to stand out on continental shelves.

By this time a decision had been made to concentrate on four markets, with France and Spain the first two main ones. The export drive was still in the hands of McGhee and another of the company's founders, but both were still preoccupied with the UK.

Hence the move in 1990 to recruit a 'Mr Europe': Kim Fletcher, an ex-Heinz manager who was operating across western Europe as international marketing manager for a flavours and essences company.

His new brief involved two key tasks: fine-tuning Derwent Valley's products, packaging, pricing and presentation for each main market; and finding strong local partners which, unlike many of the company's previous ones, really knew the country and had expertise and muscle in sales and distribution. They also had to be committed to the brand concept, 'rather than just wanting an interesting addition to their product range', says McGhee.

This strategy contrasted sharply with the company's previous approach of selling the product wherever and through whomever it could. Fletcher's groundwork bore fruit in 1992 with a quick succession of new deals - each with hand-picked but different types of partner - in The Netherlands, France and Spain. These are doing well and have boosted Derwent Valley's exports to the continental Europe by half in 1992-93.

And then there is Germany. Back in late 1988, Derwent Valley thought it had broken its long run of bad experiences with German distributors, and had just signed up a local tobacco manufacturer moving into food brokerage. But, as with other tobacco companies, its sales force failed to break into the food side of supermarkets. The market opportunities in tobacco which arose from the opening of East Germany also distracted it in the midst of a Phileas Fogg test marketing exercise, and $£ 200000$ of Derwent Valley’s investment went down the drain in 1989-90.
'We really had our underpants scorched,' grins McKechnie. 'After that, we weren't in too much of a hurry to go back in.' Last October Derwent Valley finally appointed a new distributor - an experienced operator which sells to delicatessens.

On the company's current projections, exports to European countries (including Ireland) will grow from $£ 1.5 \mathrm{~m}$ to at least $£ 13 \mathrm{~m}$ over the next three years. At best, they could go to almost double that.'

Source: Christopher Lorenz ‘Innocents Abroad’ Financial Times, 4 January, 1993.

## Case study 4: Cross border trade in soft drinks

Here, the case is drawn from a trade magazine, so the writer expects readers to have some technical knowledge. This should not prevent you from applying transaction cost reasoning to the article, so have a go! In many developing countries, soft drinks have become a vital market for sugar growers.
'European buying groups are a real dilemma for most manufacturers. It is too early to judge whether they will result in a further squeeze of manufacturer's margins, or whether they will facilitate distribution and act as a collaborative force within the food chain.

In the meantime, an increasing number of groups are emerging: the latest in August 1992 suggests that Sucro, a German food wholesaler to C stores, is talking with a counterpart in the UK to form yet another European buying alliance. What is certain is that these groups are here to stay, but memberships will change until all partners share a common mutual interest.

Some manufacturers we spoke with believed that such potentially awesome buying power gave rise to a number of legal issues - in particular, the possible abuse of dominant positions. They were quick to remind us that several of the buying groups and retail alliances are based in Switzerland, in tax-attractive areas and outside the control of the EC.

Demands for equal terms
Manufacturers are also understandably concerned that contracts negotiated with certain retailers are no longer confidential. After all the basis of most alliances is the free exchange of information which may include details on the conditions of supplies.

This is an issue which the Euro Group recently investigated and found that CocaCola offered lower prices to retailers in Belgium than in many other countries. This led Docks de France (a member of Euro Group via Paridoc) to ask Coca-Cola for terms similar to those enjoyed by GIB. The soft drink multinational refused, insisting that national terms and conditions must be respected.

Trans-shipments are threatened
However, what is stopping Docks de France from buying soft drinks from GIB, who no doubt will be able to negotiate even better prices from Coca-Cola? This is sometimes referred to as trans shipments which are extremely difficult to monitor.

Trans-shipments have a distorting effect on the market. Manufacturers obviously need to know the origins of demand in order to develop their production, marketing and new product development programmes. The issue in the end has to be settled by the European Commission which in the past has allowed manufacturers to operate selective distribution agreements.

Therefore Coca-Cola could theoretically de-list Docks de France if it tried to buy product from GIB, but this would only play into the hands of Coca-Cola's competitors. Such a scenario is, of course, highly unlikely with such a brand, but is a very worrying perspective for suppliers of brands with much less bargaining power.

The European retail alliances and buying groups all agree that they can best enable a manufacturer to become pan-European. Deuro, one of the most secretive of all the alliances, is at least proud to publicise its various Euro-promotions. AMS for its part employs around a dozen field staff to identify market niches for the benefit of manufacturers and its retail members. Sales promotions are then organised among member companies.

Pauls Food group, a subsidiary of Harrisons and Crosfield, is an expanding own label supplier of breakfast cereals operating five plants in the UK and one in northern France. It too has recently concluded an agreement with AMS to sell own-label cereals. EMD for its part, reported that by 1992, 40 agreements had been signed with suppliers in a number of countries.

A scenario for the year 2000
Earlier in the year at a press conference in Switzerland the head of EMD, Dr Peter Hampl, presented his vision for Europe. By the year 2000 he suggests that the value of the European retail market will increase to 600 billion ecus. Within this market he envisages some 20 European buying groups within the 10 to 50 billion ecus sales brackets and a maximum of three groups with sales between 50 and 100 million ecus.'

Source: Tim Cooke ‘European Buying Groups Burst Into Life’ Food Europe, Autumn 1992 .

## Case study 5: Contracts for Russian grain; lessons from North America

The next example returns to Russia (a good place to look at how business is attempting to overcome high transactions costs!) Here, the extract describes the way American grain traders constructed a grain contract to use in Russia. The mid-west of the United States and western Canada have long been in the forefront of creating new institutions to facilitate grain trading. Here, the expertise is applied to Russia. See what you think.

Cash contracts
A principal inhibitor to broad scale development of the grain exchanges was that bona fide contract mechanisms were not in place. The number of defaults have been large,
and difficulty exists in filling some orders. As a result, a Model Cash Contract was developed and has been adopted in principal at many exchanges.

Features of this contract are similar to some contracts used in US cash grain trade, including specifications for quality, quantity, and specific procedures for arbitration. However, because of the high frequency of default, in part, from inflation, special provisions were included for performance guarantees. These are:

> Within 3 business days both buyer and seller shall provide to the exchange cash or bond or any other acceptable security equal to the amount of the contract quantity multiplied by the price per ton in the following schedule:

> If shipment within 10 days none
> If shipment within 11 to 30 days minus $5 \%$ of agreed price If shipment within 31 to 60 days minus $15 \%$ of agreed price If shipment within 61 to 90 days minus $25 \%$ of agreed price If shipment within 91 to 120 days minus $40 \%$ of agreed price

The purpose of this clause is to provide incentives for both parties to perform upon their contract, thereby providing integrity to the exchange mechanism. This is critical, given the inflationary environment and rapidly changing state procurement prices. However, an important problem exists in providing a mechanism to finance these prepayments.

The future of Russian grain trading
The Russian grain marketing system is in a state of transition from a command system to the emergence of commercial mechanisms that could supplant previous regimes. Given the size of the Russian market, and the potential for grain production, changes occurring in the market system have important implications for the world grain trading system.

Although there are many subtle changes, there are three of particular importance. First, two new firms or agencies have emerged, each with very broad functions. The privatisation process in the case of grains in some sense essentially involves transforming a government bureaucratic organisation to a private monopoly under the auspices of a 'joint-stock' company. Roskhleboprodukt controls the domestic market system and many of the functions, and is a principal shareholder and client of ExportKhleb. The latter has expanded its sphere of enterprises substantially and will, no doubt, evolve to become a dominant trader of numerous world grains and commodities.

Second, trade restrictions (i.e., export licences) and exploitation of market power by former republics in transport functions preclude full integration of Russian markets with other world markets. Until and unless these are removed, signals throughout the market system will continue to be distorted. Third, is emergence of commodity exchanges as alternatives to the state distribution system. At this point, a dual marketing system is operating in Russia. However, it should be emphasised that for many reasons listed below, the state distribution system will continue to dominate and inhibit development of commodity exchanges.

## Further development of exchange mechanisms

Markets are simply the cumulation of transactions between buyers and sellers of similar grains and evolve in response to the economic needs of participants to determine the value of grain. The mere fact that there has been a rapid escalation of grain exchanges in the FSU is illustrative of the demand for price discovery and efficient mechanisms to conduct transactions as alternatives to the state distribution system. A normal transition would be for several types of markets eventually to emerge, to include spot, forward, and futures markets. However, a prerequisite to any form of forward or futures market would be the existence of some form of nearer term spot transaction mechanisms.

A number of important requirements are necessary for orderly market exchanges. These include standardisation of terms of trade and contract language, and development of mechanisms to enforce contracts. Each of these are in the process of being adopted in the Russian grain industry. Prerequisites of particular importance to further development of exchanges in Russia include

1. adoption of trading instruments encompassing standardised contracts and terms of trade, and arbitration procedures;
2. a mechanism to finance prepayment (performance bonds) on forward contracts;
3. changes in laws to eliminate or reduce middleman profits to encourage trading on exchanges;
4. a reduction of powers of Roskhleboprodukt, facilitating greater competition in marketing functions;
5. reduction of trade restrictions between republics of the FSU that create distortions in market determined prices, thereby distorting signals and precluding arbitrage;

Items 1 to 3 are focused specifically on the exchange process and are necessary to be adopted for further development of cash exchanges in the Russian grain marketing system.

The momentum and enthusiasm for the development of futures contracts is tremendous. However, it must to be emphasised that viable and properly functioning cash markets (encompassing the items listed above) are a prerequisite to development of futures markets. In addition, there are four additional requirements for futures in Russia. First, a banking system with an efficient mechanism for funds transfer must be developed. Currently, it sometimes takes weeks to transfer funds even for a cash transaction. Efficient funds transfer are required for a properly functioning clearing system, which is the hallmark of any futures exchange. Second, a regulatory structure compatible with facilitating futures trading is needed. Third, is development of speculative traders capable of absorbing risk that hedgers seek to reduce. Fourth, is the adoption of a competitive marketing system in the functions performed. Delivery and convergence of cash and futures prices can be achieved only with unrestrained access to a competitive marketing system. During 1992 and 1993, one buyer, Roskhleboprodukt, dominated the market and their decisions influenced prices
through the procurement process, and control of the handling and transport sectors. Such dominance by a single agency in a market system is incompatible with development of futures markets and, for that matter, an efficient market system.'

## Source: William W. Wilson and Alexander Belozertseu (1995) 'Russian Grain Trading And Marketing: Evolution and Struggles’, Agribusiness 11(1) pages 1-12.

## Case study 6: Retail development in Asia

This extract from an article in a trade magazine illustrates how transaction costs can be applied to changes in the transport and distribution of food (the 'logistical operations').
'Retail channels across most of ESEA (East and South East Asia) are rapidly modernising. Between 1985 and 1990, supermarkets, hypermarkets and convenience stores in Hong Kong saw a three-fold increase in their share of grocery volume and now account for over $60 \%$ of grocery sales.

Other Asian countries, especially Taiwan and South Korea, are poised to follow Hong Kong. Modern retailers in Taiwan held a mere 3\% share of grocery volume in 1987 and four years later that share had reached $40 \%$. The poorer countries will follow in due course with the first shifts occurring in the urban centres of Bangkok, Kuala Lumpur, Jakarta and Manila. 'There are opportunities for sophisticated players to establish 'preferred supplier' relationships with emerging retailers and ride the growth in the retailer's market share,' David White of McKinsey believes.

In the 1990s, trade marketing and channel management will be where the competitive game is lost and won. Asian store formats are indeed diversifying and segmenting the grocery market. Circle K and 7-Eleven convenience stores proliferate the region. By 1991 there were already more than 1100 convenience stores in Taiwan - with industry projections of an additional 2000 stores by 1995.

Across Asia, supermarket chains such as Wellcome and NTUC are building. Taiwan had 180 modern supermarkets by 1989 with another 400 to 500 , and some 20 hypermarkets expected by 1995.

Most of the emerging retailers have already adopted, or are introducing scanners. In Hong Kong and Taiwan electronic ordering systems are in place. Store management trends reflect those in Australia. Decision making in areas such as store assortment, shelf-space allocation and store inventory is becoming increasingly centralised.'

Source: Food Europe, Autumn 1993, page 21.

## Case study 7: Taiwanese firm moving into China

The final extract is also about Asia, this time the rise of President Enterprises Corporation (PEC). The article paints a picture of a highly innovative company
which seeks to reduce transactions costs in many ways. See if you can list the different methods it uses.
'It started life as a small producer of animal feed and flour. Now President Enterprises Corp. (PEC), the company set up in 1967 by Kao Chin-yen and a group of investors in Taiwan's former capital of Tainan, is the country's biggest food producer. Mr Kao has his sights set higher still. By its 50th anniversary in 2017, he wants PEC to be the world's largest food group, with sales of $\$ 120$ billion - nearly three times the current sales of Switzerland's Nestlé, the world's largest food company.

PEC has natural advantages in China, not least its Chineseness. It also has valuable Chinese brands, such as Taiwan's first premium instant-noodle 'Imperial Big Meal'. However, PEC's real test will be whether the strategy it has used successfully to sell to 21 m Chinese in Taiwan can also work for 1.2 billion more on the mainland. That strategy starts by doing the same things that Western firms such as Nestlé do in developing markets: first, establish sales channels by making basic, mass-produced foodstuffs that the locals can afford; then, as consumers grow richer, pump higher value-added products through the same channels. But PEC then adds some ideas of its own. In Taiwan PEC's sales have increased almost exactly in line with growth in GDP per head (see chart on next page). When Taiwan's GDP per head was $\$ 700$, PEC concentrated on making such things as edible oil, flour and animal feeds. As consumers got richer it moved into instant noodles, carbonated drinks and other beverages. Then it progressed into retailing by building a chain of convenience stores, 1000 of them under the 7 -Eleven franchise. Later it added hypermarkets, in partnership with Carrefour, a French group.

Unlike Western firms that are fixated on 'core competencies', PEC likes to have a hand in most things connected with its business. It grows many of its ingredients on its own farms. Specialist in-house distribution and logistics divisions have been set up; PEC also owns one of the world's biggest tin-plate operations to make cans for food and drink. With Taiwan's GDP per head now over $\$ 10000$, the company is shifting into service businesses such as banking and insurance. Yet food remains at its heart. Last year it even created a health-food division.

PEC often teams up with foreign groups trying to break into fast-growing Asian markets. Its joint ventures in Taiwan include one with Japan's Kikkoman (making soy sauce), one with San Miguel of the Philippines (ice-cream) and several with America's PepsiCo (potato crisps, cola and Kentucky Fried Chicken). But its relations with PepsiCo look strained. Earlier this year PEC failed to renew one of its 37 Kentucky Fried Chicken franchises amid reports that the outlets were making little money. PEC may also be disappointed that Pepsi-Cola has failed to gain market share from Coca-Cola.

Despite this, some firms still see PEC as their ticket into China. In May PEC struck a deal to handle sales of Kirin beer in Shanghai and Guangzhou for the giant Japanese brewer. Along Shanghai's bustling Nanjing Road, PEC's advertisements already vie with a welter of other consumer-goods ads. Although there is a big debate about how rich China's people are (the official estimate of GDP per head of
less than $\$ 400$ looks too low), PEC reckons that, at least in urban areas, growth in income has been rapid enough to propel China into the instant-noodle stage of development.

Unsurprisingly, instant noodles form a large part of the output of the 11 foodprocessing plants that PEC has opened in China. In the past three years, the firm has invested a total of $\$ 150 \mathrm{~m}$ on the mainland. Its instant-noodle factory in Beijing began production in 1992 with an investment of $\$ 5 \mathrm{~m}$. Its sales this year

are forecast to reach $\$ 28 \mathrm{~m}$, returning a profit of $\$ 4.5 \mathrm{~m}$. PEC says the plant has captured some $30 \%$ of the Beijing instant-noodle market. But it faces tough competition, not least from Indo-food, part of Indonesia's Salim Group.

No foreign company, regardless of origin, mops up painlessly in China. Even though China is deregulating its rickety, and mostly state-monopolised, distribution system, it is not certain that the Taiwanese firm will be able to build an alternative that it can completely control. Local politicians often force outsiders to use local wholesalers; state distributors can be the only way to reach the hundreds of thousands of small retail outlets where food and drink are sold. Nor is it certain that PEC will be able to attack the market through its own convenience stores, as it did in Taiwan. For one thing, America's Southland Corporation, which owns the 7-Eleven brand, has been awarding the franchise to different operators in different parts of China. In Shenzhen, for instance, Dairy Farm, part of Hong Kong's Jardine Matheson, already operates nine 7-Eleven stores and is opening ten more.

Jason Lin, PEC's president, admits that the mainland market is complex. You need only drive for a few hours (even on China's slow roads) to find people preferring different-flavoured food, he says. Another hitch is political: China still regards Taiwan as a renegade province, and Taiwan bans its businessmen from having direct trade links with the mainland. Like many other Taiwanese firms, PEC routes its mainland business through a Hong Kong firm. Yet despite China's fury at the recent visit to America by Taiwan's president, Lee Teng-hui, Mr Lin
expects relations to improve. He hopes shortly to be allowed to bring managers from China to Taiwan for training.

Even so, PEC has some way to go before it ties up Asia - let alone the world with its noodles. And many of the company's methods may strike Western companies as strange. They should ask themselves whether their own tactics in China might not strike locals as equally odd. If nothing else, PEC is a reminder to Nestlé, Unilever and the rest that their much-vaunted global strategies have also to be local enough to beat locals at their own game.'

Source: The Economist, 17 June 1995, pages 81-82.

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[^0]:    * Can you see how a partnership contract differs from the contract made in an open market exchange?

