

Reactions of Swiss employers to the immigration freeze¹

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1. Introduction

In 1973-74 a turning-point was reached in the immigration policies of many host countries. These include Switzerland, where the authorities now permit only a limited number of foreign workers to enter the country no matter what the employers' needs for labour may be. As a result, the 250,000 or so foreigners who left Switzerland between 1973 and 1976 must now be written off as a source of manpower for the Swiss economy. Consequently, when economic activity eventually picks up again, it will not be long before employers find themselves up against a shortage of unskilled labour. One way in which an employer could get round this difficulty would be to transfer the whole or part of his operations to a country in which there is a labour surplus. In so far as these business activities were transferred to regions which hitherto exported labour to Switzerland, such a step would also help to relieve the employment problems of the labour-exporting countries.

This perfect substitution of capital flow for labour flow is by no means easy to achieve, however. For example, there are certain activities employing large numbers of immigrant workers which cannot under any circumstances be transferred (building, the hotel trade, hospitals). Besides, it is up to the employer to decide whether he wants to transfer his operations and, if so, to what country; and since his main concern is likely to be profit maximisation, his choice will not necessarily be consistent with an improvement in the international division of labour.

In order to study the transfer of jobs as a substitute for temporary migration by workers, we felt it would be useful to conduct a survey of the undertakings that are most directly concerned with questions of labour supply and direct investment abroad, i.e. those in the secondary sector. Our aim was to investigate the results of various experiments in employment creation abroad and to discover the past reactions and medium-term strategies of employers in the face of varying labour market conditions.

A questionnaire was sent to 250 undertakings in industries which have already set up production units abroad or are in a position to do so. We

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Table 1. Undertakings replying to the questionnaire, by branch of activity

Branch of activity	No. of undertakings	% of total
Food, drink, tobacco	5	4.9
Textiles, clothing, footwear	11	10.7
Chemicals, rubber, processing of synthetic materials	13	12.6
Metalworking	9	8.7
Engineering (machinery, equipment, tools)	43	41.7
Watchmaking	15	14.6
Other	7	6.8
All branches	103	100.0

received completed questionnaires from 103 of these. The breakdown of the sample by branch of activity is shown in table 1.

Attention should be drawn to the high percentage of replies from the engineering industry (41.7 per cent); in Switzerland this branch accounts for 32.1 per cent of all industrial employment. The other branches which are in a position to create jobs in countries where there is an abundance of labour (textiles and clothing, metalworking, watchmaking) are also well represented.

The sample includes a large number of small and medium-sized undertakings—63 per cent of the respondent firms employ fewer than 500 workers in Switzerland and abroad. These are the ones most directly affected by problems of labour supply and labour costs.

2. The influence of the labour shortage on the employer's behaviour

Vulnerability to the labour shortage

First of all, we thought it would be useful to find out with the aid of the questionnaire what effects the state of the labour market—surplus or shortage of manpower—can have on the undertaking and the employer's behaviour.

A study of the situation in Switzerland since 1945 is particularly interesting in this respect in that its labour market has gone through two quite distinct phases: extremely open and flexible to start with, but later on showing signs of increasing strain. Prior to 1963-64 employers were able to make almost unlimited use of foreign labour thanks to the country's liberal immigration policy. From then on, however, although the number of immigrants continued to rise for a while, their entry was more strictly controlled. It will therefore be interesting to see whether, and if so how, the firms in our sample have been affected by this transition from a massive influx of foreign workers to the progressive tightening of immigration restrictions which resulted towards the end of the 1960s in the stabilisation of their numbers and later in a sharp decline.

The first question to be asked, then, is whether or not the undertakings have been affected by the steps taken by the federal authorities to restrict the entry of foreign workers. The survey shows that 66 per cent of the undertakings responding to the questionnaire have had difficulty in expanding because of these restrictions or have been forced to adjust in one way or another to the new situation. The other 34 per cent have not been affected. In the textiles and clothing industries the percentage of undertakings hit by the immigration restrictions is significantly higher than the average; this is not surprising in view of the fact that these are labour-intensive branches paying relatively low wages and are thus unable to attract Swiss workers from other sectors. Conversely, the chemicals industry has been least affected, doubtless because it is capital-intensive, pays high wages and most of its undertakings are located in border regions where they can employ frontier workers, who are not subject to the restrictions.

Adjustment measures

In the questionnaire the undertakings affected by the cut-back in labour supply were asked what steps they had taken to adjust to the new situation and whether these included one or more of the following:

- substituting capital for labour; ²
- adjusting the product mix: the employer concentrates on items which lend themselves best to automated production and abandons the others;
- encouraging greater labour force participation: the employer seeks to hire workers who are currently outside the labour force (for example, married women, retired persons);
- subcontracting part of their operations to other Swiss or foreign undertakings;
- investing directly in another country; the employer sets up production units abroad;
- curtailing production.

Analysis of the over-all results shows that it is mainly through investment in rationalisation (substituting capital for labour) that the employers have tried to ease the labour shortage (41 per cent of the undertakings). Direct investment abroad has also been a fairly common response (26 per cent). Following these come subcontracting abroad (14 per cent) and in Switzerland (10 per cent), and finally 9 per cent of the undertakings have had to put the brakes on production.

In the medium-sized and large undertakings rationalisation has been by far the commonest form of adjustment. Subcontracting is the approach more often used by the smaller firms, particularly those employing fewer than 100 workers. There is also a link between direct investment abroad and the size of the undertaking: the larger the undertaking the more it has tended to transfer some of its production capacity in response to labour shortages.

How employers plan to meet future labour shortages

Reference to labour shortages at a time when the Swiss economy is going through its worst recession since the Second World War might seem meaningless. However, the part of the questionnaire dealing with employers' future policy posed the hypothesis that the authorities would continue to enforce immigration restrictions once the economy had resumed a normal rate of growth. Really this is more than a hypothesis: it is a virtual certainty. The total of 300,000 or so foreign workers who have so far returned home because of the recession have gone back for good. Thus, when the economic situation returns to normal, labour will once again be a scarce production factor. The facts already tend to confirm this since even now several sectors are experiencing difficulty in finding all the workers they need. How do they plan to cope with this situation?

Compared with the way the undertakings adjusted between 1963 and the start of the latest recession, future policy is characterised by the more marked priority given to rationalisation: 54 per cent of the undertakings questioned expect to alleviate the shortage of manpower by substituting capital for labour. There is also a more pronounced trend towards direct investment abroad (31 per cent), particularly in the textiles and clothing industries (44 per cent). It should be pointed out, however, that if a large number of undertakings are now planning to transfer all or part of their production abroad, this is also—and perhaps mainly—due to the continuous rise in the value of the Swiss franc which reduces the competitiveness of Swiss-based industries.

The influence of labour availability on the choice between rationalisation and expansion

Economists generally maintain that an abundant supply of labour leads the employer to give priority to investment in expansion (increasing the production capacity without altering the production techniques), while a shortage of labour provides an impetus for rationalisation and automation. What are the facts of the matter?

On the whole, the employers' replies cannot be said to provide much support for this hypothesis: 81 per cent of them consider that an abundant labour supply is not an obstacle to rationalisation and the introduction of automated processes, while only 19 per cent would forgo further automation if they had a plentiful supply of labour. The state of the labour market plays a more important role, however, in the textiles and clothing industries as well as in metalworking: 30 per cent of the undertakings in the first two branches and 44 per cent in the last would, or might, abandon further automation if there were an abundant supply of labour. Conversely, 92 per cent of undertakings in the chemicals industry do not consider that labour supply is an important factor in investment decisions of this sort.

However, the employers quite justifiably object that the problem is posed in an oversimplified manner. In particular, the following factors should be taken into account:

- It is not always easy, or even possible, to classify an investment in one or other of the two categories named. In fact, an investment can—and in most cases probably does—serve both objectives: expansion and rationalisation.
- The expansion of production capacity may be planned as only a temporary expedient prior to rationalisation, since the latter does not generally allow for adjustment to marginal increases in demand.
- It frequently happens that rationalisation measures are motivated not by the situation on the labour market (shortage of manpower) but by the situation on the product market. The employer may thus be induced to automate his equipment in order to lower his prime costs, improve the quality of his products and meet tight delivery schedules.

At first glance, it would seem that for the majority of undertakings the availability of manpower is of only secondary importance in determining the choice of investment. In order to verify the plausibility of this finding, we tried to establish the extent to which undertakings confronted with a reduced supply of labour have modified their behaviour in regard to investment. According to the economists, as long as the flow of immigrants remained fairly steady (up to 1965 or thereabouts) the employers may be expected to have invested mainly in expansion since they had a plentiful supply of labour, whereas they should have found it necessary to automate and rationalise once immigration policy was tightened up.³ However, only 9 per cent of the employers report that this is what actually happened in their undertakings. Another 46 per cent concede that this theory is not entirely wrong but 42 per cent maintain that it is. The majority declare that they rationalised their operations well before the introduction of immigration restrictions, principally to maintain their competitiveness as regards both prices and product quality.

Since the results of the survey clearly show that the amount of manpower available is only one of a number of factors governing the choice of production equipment, we asked the undertakings which reported that they were not affected by the state of the labour market to specify the criteria for their investment decisions. Fifty-nine per cent of these consider that the minimisation of production costs is the prime factor. After this come the use of the most advanced technology (25 per cent) and financial considerations, i.e. cost of equipment, state of the capital market, etc. (16 per cent). It was found that the importance of financial considerations varies in inverse proportion to the size of the undertaking. However, it should be noted that here again the problem was formulated in oversimplified terms. For example, the technology adopted and production costs are often inter-related. Furthermore, local production conditions as well as each undertaking's particular circumstances cannot be overlooked.

3. Transfer of operations abroad

Investment behaviour and characteristics of the undertaking

We shall examine first of all the link between particular branches of activity and the geographical distribution of investment. For this purpose we distinguish the following three groups of countries:

- Group I — Countries with a manpower surplus which traditionally export labour to Switzerland (Italy, Spain, Greece, Turkey).
- Group II — Industrialised countries, some of which traditionally export labour to Switzerland (France, Federal Republic of Germany).
- Group III — Third World countries. It should be noted that we have included in this group the Arab oil-producing countries, in which direct investment by Swiss undertakings is growing.

Table 2 covers only those undertakings that have production operations abroad. It should be interpreted as follows: the figure 67 (first line, first column) means that in the food industry 67 per cent of these undertakings have set up production units in the manpower-surplus countries which traditionally export labour to Switzerland (Group I). In addition, all the undertakings in this branch that have invested abroad have done so in industrialised countries. Since many firms are established in more than one group of countries the percentage total for each line generally exceeds 100.

The over-all results show that more than three-quarters of Swiss undertakings established abroad are located either entirely or partly in industrialised countries. It can legitimately be assumed, then, that the factors "availability of manpower" and "level of wages" have played only a secondary role in deciding where to invest. These employers have probably attached greater importance to such considerations as market openings, the possibility of avoiding customs barriers, social and political stability, etc.

It was also found that 45 per cent of the undertakings established abroad have set up production units in manpower-surplus countries which traditionally export labour to Switzerland, while only 26 per cent of them have invested in the countries in Group III. The latter countries can provide very large quantities of unskilled labour at low wages but they have the major disadvantage of not being able to offer skilled workers. When an employer invests in a far-off country—e.g. in the Third World—it is highly improbable that the state of the labour market (cost and availability of manpower) will be his sole criterion; the desire to find a new market outlet (as in watchmaking) or proximity to sources of raw materials usually plays a part in his decision.

Comparison of the results by branch of activity reveals some significant differences, which are brought out more clearly by the index figures in table 2. Thus the textiles and clothing industries show a very marked tendency to invest in the traditional labour-exporting countries; in the case of textiles, this is not unconnected with the fact that this branch is the least capital-intensive of all

Table 2. Direct investment in different groups of countries, by branch of activity
(% of undertakings and index figures)

Branch of activity	Country group					
	I		II		III	
	%	Index	%	Index	%	Index
Food	67	29	100	43	67	28
Textiles and clothing	44	44	44	45	12	11
Chemicals	58	32	92	50	33	18
Metalworking	44	33	89	67	—	—
Engineering	43	29	83	56	23	15
Watchmaking	46	33	46	33	46	34
Other	20	17	80	66	20	17
All branches	45	32	76	53	26	15

Note: To simplify the presentation of tables 2 to 6, we have abbreviated the branches of activity listed in table 1.

those in our sample. On the other hand, the employers in the watchmaking industry have, relatively speaking, channelled the largest proportion of investments towards the Third World, which is explained by the fact that obtaining new markets is an essential goal in this industry's development policy.

The propensity to invest in Group I countries is—with the sole exception of the textiles and clothing industries—approximately the same from one branch to another. The hypothesis that labour-intensive undertakings (or branches) invest more readily in these countries is thus only partly confirmed.

Once again, it should be stressed that the amount of manpower available is only one of the variables that explain the choice of country for direct investment. There is also the qualitative aspect, i.e. the level of training of such manpower. The survey reveals in fact that there is a link between the proportion of skilled workers employed by undertakings and the type of country in which they invest directly. This trend is particularly clear in the countries in Group I where there is relatively little skilled labour. A drop in the proportion of skilled workers employed goes hand in hand with an increased propensity to invest in the traditional labour-exporting countries. Undertakings that use a high proportion of skilled labour direct the greater part of their investment towards industrialised countries which are able to supply this category of worker.

Future policy regarding the location of investment abroad

The employers were also asked to indicate which group of countries would be their first choice for transferring a part of their operations to if they were no longer able to find sufficient manpower on the Swiss market, or for other reasons.

Table 3. Future investment preferences, by branch of activity
(% of undertakings)

Branch of activity	Country group		
	I	II	III
Food	25	50	25
Textiles and clothing	44	56	—
Chemicals	14	86	—
Metalworking	30	70	—
Engineering	22	61	17
Watchmaking	20	20	60
Other	—	100	—
All branches	23	60	17

Table 3 shows the employers' intentions in this regard. It should be interpreted as follows: in the food industry, half the employers anticipate that they will give priority to investment in the industrialised countries. One employer in four will give priority to investment in the Third World and the same proportion to investment in the countries which traditionally export labour to Switzerland. The total for each line equals 100 since only the first preference is taken into account.

When one compares the employers' intentions regarding the location of future investment abroad with the current geographical distribution of Swiss undertakings abroad (see the index figures in table 2), quite significant differences emerge. For example, the proportion of total direct investment in the industrialised countries will tend to increase. This is true for all branches except watchmaking. It seems, then, that marketing factors and the social and political stability of the country considered for investment tend to play an increasingly important part in the choice, as opposed to the state of the labour market (availability and cost of manpower). As far as the watchmaking firms are concerned, they mainly intend to invest in the Third World. In this way they can benefit from an abundant supply of inexpensive labour while at the same time penetrating new markets. The development of electronic watches, which call for a lower level of skill than traditional watchmaking, also explains this preference. Over-all, the undertakings will invest relatively less in the countries which traditionally export labour to Switzerland.

Investment in countries with a manpower surplus

Motives

For the purposes of our research, it was important to know the reasons which prompt employers to set up production units in countries with a manpower surplus (countries which traditionally export labour to Switzerland and Third World countries). Accordingly, we drew up a list of possible reasons, grouping them in two categories: those connected with the labour market

Table 4. Reasons for direct investment abroad
(% of undertakings)

Branch of activity	Reasons connected with	
	Product market	Labour market
Food	34	66
Textiles and clothing	17	83
Chemicals	83	17
Metalworking	66	34
Engineering	60	40
Watchmaking	18	82
All branches	47	53

(availability of manpower, level of wages) and those relating to the product market (opening up new markets, possibility of avoiding customs barriers). On aggregate it was found that the importance attached to one or other market is roughly the same (see table 4). It is nevertheless probable that if we had included all countries and not just those with a manpower surplus, we would have found that reasons connected with the product market clearly predominated.

Fairly important differences were observed between one branch and another. Reasons connected with the product market are uppermost in chemicals, metalworking and engineering. The chemicals industry is an extreme case. None of its undertakings cites a shortage of labour as a reason for setting up operations abroad (the 17 per cent shown in the second column of table 4 consider that production costs in Switzerland are too high). There are several explanations for this. First, the chemicals industry is capital-intensive, pays high wages and has thus been able to attract labour from other branches. Finally, many of these undertakings are, as we have seen, located in border regions and are therefore less affected by immigration restrictions since they can use frontier workers.

The watchmakers' replies may cause some surprise. They clearly show that it is principally manpower problems (availability and cost) that have induced these undertakings to set up production units in manpower-surplus countries. We know, however, that in this industry direct investment is aimed at least as much at securing market outlets for its products as at taking advantage of favourable conditions on the labour market. The explanation is that employers in the watchmaking industry are particularly sensitive to the high cost of labour in Switzerland and the difficulty in obtaining all the workers they need: on the one hand, direct investment abroad is a relatively new phenomenon in this industry and a very high proportion of employment and production equipment is located on Swiss soil; on the other hand, watchmaking occupies a rather lowly position in the wages hierarchy, which is why inter-branch labour mobility has had an adverse effect on the industry.

Table 5. Adaptation of production technologies to availability of manpower
(% of undertakings)

Branch of activity	No change	Elimination of automa- tion in certain processes	Major changes
Food	50	50	—
Textiles and clothing	—	80	20
Chemicals	—	71	29
Metalworking	—	100	—
Engineering	14	46	40
Watchmaking	—	62	38
All branches	9	62	29

Adapting technology to labour supply

Almost 80 per cent of the respondent undertakings adapt their technology to the manpower supply situation in their production units abroad (see table 5). In the countries which have a manpower surplus the level of wages is generally well below the Swiss level; it is natural, therefore, that undertakings should seek to introduce production technologies which require more labour and less capital.

The trend that emerges is much the same for all branches, with the possible exception of food and metalworking, in which it must nevertheless be pointed out that the results lack significance owing to an insufficient number of replies to this question. It seems, therefore, that the adaptation of production technology is not linked to the capital intensity of the branch concerned.

Lack of skilled workers

More than 30 per cent of the undertakings which have set up production units in countries with a manpower surplus (Groups I and III) experienced difficulties in obtaining sufficient skilled labour (see table 6). This scarcity has made itself felt particularly in the watchmaking industry where two-thirds of the undertakings indicate they have had to contend with a major shortage of skilled workers. It should be recalled that it is precisely the watchmaking industry which has the highest propensity to invest in the Third World and this could be one explanation.

Some undertakings indicate that they have been able to satisfy their needs for skilled labour by using migrant workers who have returned home. It is clear from the employers' comments that a particular difficulty is obtaining supervisory staff in the countries in which they have set up operations.

Where the employer finds he is unable to hire the necessary skilled staff locally, he may try to solve the problem by technical means such as using

Table 6. Satisfaction of skilled labour requirements, by branch of activity
(% of undertakings)

Branch of activity	Satisfaction of skilled labour requirements		
	Distinctly inadequate	Partial	Adequate
Food	—	50	50
Textiles and clothing	20	40	40
Chemicals	29	—	71
Metalworking	—	—	100
Engineering	36	43	21
Watchmaking	67	22	11
All branches	35	28	37

production processes which call for fewer skilled workers. Another solution is to train the personnel he needs. This can be done by various means: on-the-job training abroad or in Switzerland; training Swiss workers or foreigners; training supervisory staff, technical staff or blue-collar workers; and, if the production unit is located in a country which traditionally exports workers to Switzerland, using migrant workers who have returned home.

Table 7 shows that the shortage of skilled labour only rarely leads to a modification of the production techniques. If an employer does not find sufficient skilled workers in the country to which he has transferred operations, he generally trains personnel both in Switzerland and in the production units abroad (it would seem that supervisory personnel are mainly trained in Switzerland). Manpower training may be a once-only exercise coinciding with the establishment of a production unit abroad, and it is sometimes carried out with the assistance of the government of the country concerned.⁴ It should be noted that

Table 7. Employers' response to a shortage of skilled labour, by branch of activity
(% of undertakings)

Branch of activity	Use of production techniques requiring few skilled workers	Training personnel abroad	Training personnel in Switzerland	
			Swiss nationals	Foreign nationals
Food	—	33	67	—
Textiles and clothing	17	33	33	17
Chemicals	—	60	20	20
Metalworking	—	—	33	67
Engineering	10	25	30	35
Watchmaking	—	50	40	10
All branches	6	34	34	26

training activities of this sort have been carried out by small as well as large undertakings.

Of those which trained personnel for their production units abroad, 67 per cent trained managerial and white-collar staff; 54 per cent, technical and scientific personnel; 58 per cent, skilled and senior skilled workers; and 17 per cent, semi-skilled workers. Obviously, many of these undertakings provided training for more than one category of staff. Most of the training dispensed in Switzerland is for skilled workers, technical and scientific personnel and supervisory staff; training for jobs requiring a lower level of skill is mainly provided abroad. All in all, the undertakings considered their experiments in this field to have been successful.

* * *

The main findings that emerged from the replies to the questionnaire sent to Swiss undertakings which have set up production units abroad (or are in a position to do so) are as follows:

1. On the whole, the employers concede that there is some truth in the economists' theory that uncontrolled immigration tends to be an obstacle to rationalisation and automation while restrictions on the entry of foreign workers oblige employers to introduce labour-saving techniques, but they consider that this is to state the position in oversimplified terms.

2. Almost two-thirds of the employers have had to take steps to adjust to the shortage of labour resulting from the immigration restrictions introduced since 1963-64; they have generally opted for rationalisation measures. This suggests that the economists' hypothesis is not entirely wrong.

3. The survey results show that the state of the labour market only marginally affects the behaviour of the employer in respect of investment, whether it be in equipment (expansion or rationalisation) or the transfer of production abroad. In the majority of cases it is the state of the product market (production costs, quality) which prompts the employer to rationalise his operations or to set up production units abroad.

4. In the event of unskilled labour once again becoming a scarce production factor in Switzerland, which is highly probable, employers will above all look to rationalisation and the transfer of operations abroad for a way out of their difficulties. The proportion of direct investment in the industrialised countries will rise while employers will invest less in the countries which traditionally export labour to Switzerland.

5. Firms operating in countries where manpower is abundant and inexpensive generally seek to exploit this situation by using labour-intensive and capital-saving production processes.

6. The vast majority of undertakings (80 per cent) which are operating in Third World countries and in those that traditionally export labour to

Switzerland have had to train personnel for their production units abroad. On the whole they consider that their training activities have produced positive results.

Notes

¹ The research on which this article is based was carried out within the framework of the Migration for Employment Project of the ILO's World Employment Programme. The Economic Studies Group of the University of Neuchâtel has produced three reports on this theme: see D. Maillat, C. Jeanrenaud et J. Ph. Widmer: *Transfert d'emplois vers les pays qui disposent d'un surplus de main-d'œuvre comme alternative aux migrations internationales: le cas de la Suisse* (Geneva, ILO, May 1976, Jan. 1977 and Sep. 1977; mimeographed World Employment Programme research working papers; restricted).

² The substitution of capital for labour is considered in greater detail in the section on "The influence of labour availability on the choice between rationalisation and expansion".

³ For further details see the report of the Federal Council to the National Council's enlarged foreign affairs committee on the limitation and reduction of the number of foreign workers (dated 9 Feb. 1965), pp. 4 and 5.

⁴ For example, one watchmaking firm which had set up a production unit in a Third World country trained the vast majority of its staff—rather more than 200 people—locally with state assistance. Only 20 or so employees were trained in Switzerland.