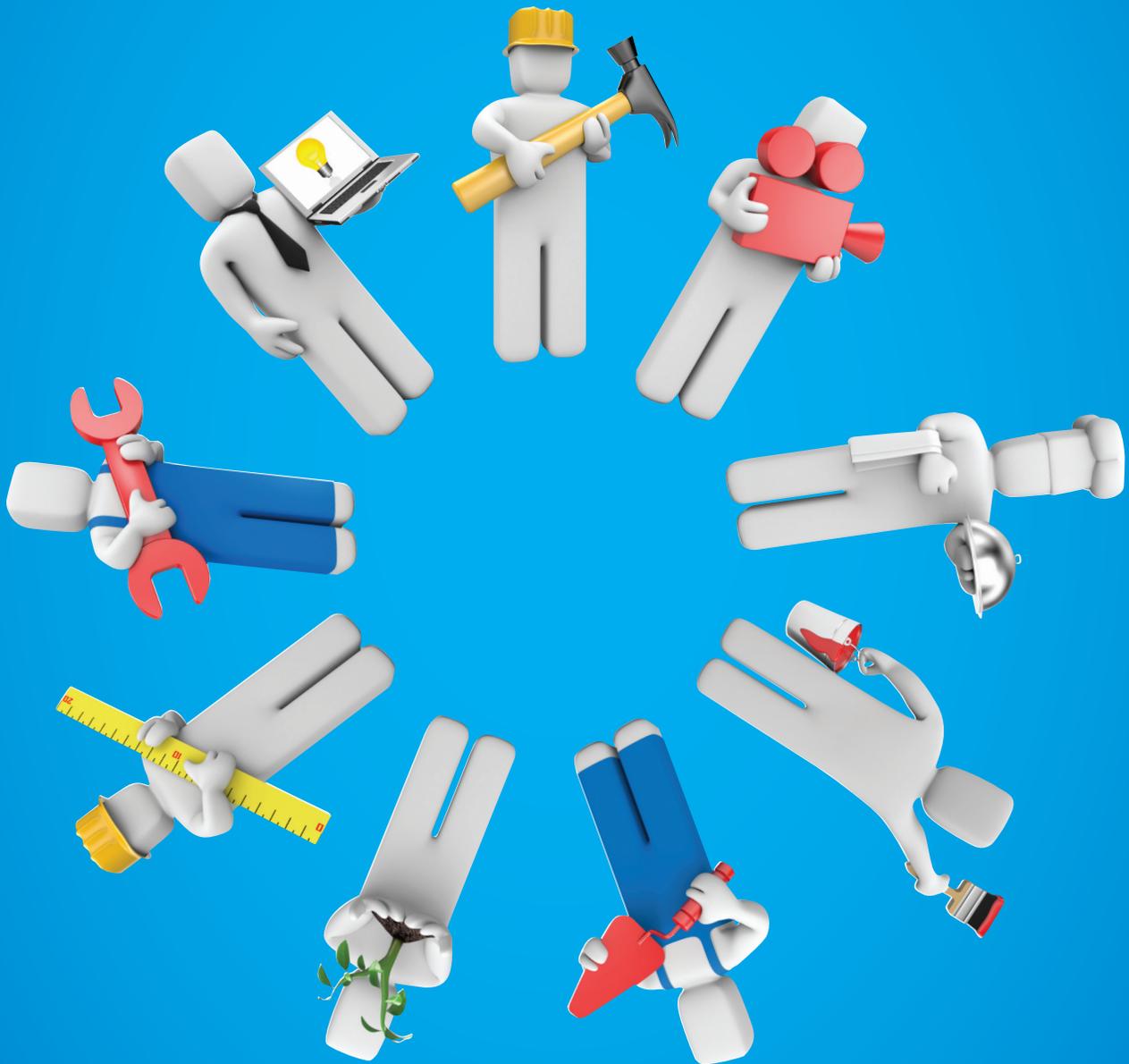


Adult Vocational Training and the Israeli Labor Market

Executive Summary

Dr. Roby Nathanson, Gilad Brand, Moran Navon & Ro'ee Levy



Adult Vocational Training Model and the Israeli Labor Market

Executive Summary

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Executive Summary

Vocational Training project has one main purpose, which is reducing the poverty rates by integrating unemployed in the Israel labor market. This project aspires to improve the socio-economic status and social mobility of vocational training participants, to improve the compatibility between the work supply and the market's needs, and long term employee's empowerment. The steering committee which consists of members of the New Histadroot, the Manufactures' association of Israel, Ministry of Industry, Trade and Labor, Ministry of Education, Professional Schools, Working and Studying Youth Group, LAHAV (Organization of Self Employed Persons and Small Business in Israel) and social organizations dealt with youth vocational training during 2010, while in 2011 the project's main objective was vocational training of adults.

The steering committee chose to focus on adults' vocational training for several reasons. First, the labor market is changing constantly in the last few years, this is expressed mainly by international competition as a result of globalization, innovation and rapid technological changes. These changes require the work-force to be updated simultaneously. Second, Macro Center's forecast by manpower planning model indicates that the age group in which the sharpest increase in number of workers is expected, is among ages 35-44 (in addition there are adults who are pushed to an early retirement). Among this population will be a large supply of workers that needs to be trained for jobs that are highly demanded, thus jobs that require educated and skilled work-force. Third, at an international perspective, Israel is falling behind in the field of vocational training for adults. For last, improving vocational training is consistent with the target set by the government to raise labor force participation rate.

Data from the Central Bureau of Statistics' manpower survey of the third quarter of the year 2011 indicates that employment rates among those aged 25-64 is only 72.3%. Data presented by Anna Gluck, Vice President of Manpower Training and Development Department in the Ministry of Industry, Trade and Labor, during a seminar regarding vocational training for adults demonstrated that during the years 2009-2010 there were about 13,000 adult participants in vocational training programs, and about 50,000 additional adults that studied in non-budgeted evening training. Between 75-80% of vocational training programs graduates are working, but a great part of them are not working in the field they were trained for.

The main challenges this project is dealing with, as brought up during steering committee meetings, are:

- Lack of short, medium and long term forecasts for the labor market. The forecast should focus not only on professions but also on skills and qualifications that will be required in the future, so that the training will be relevant to the labor market's needs.
- Discrepancy between the professional studies and the industry's requirements. There is a need in creating an incentive for the industry to take an active part in the vocational training process, and update the curriculum according to the actual demands.
- Outdated training centers that do not fit to the market's requirement. There is a need in building advanced training centers and recruiting high quality teachers. The teachers' training should include personal development, development and implementation of projects and industry seminars.

Earlier this year, the steering committee members met in order to summarize the vocational training for youth activity in the year 2010 and to discuss vocational training for adults. During this discussion challenges were identified and measures for improving the project were proposed, such as expanding the steering committee that it will include experts in adult training and conducting a seminar with the participation of experts on vocational training for adults.

During the year a steering committee meeting was held, in which a seminar regarding vocational training for adults was planned, and a discussion was held regarding many subjects, among them: the impact of technological innovations on the industry, types of vocational training, the establishment of a national institution for training and more. In addition, ongoing research work was performed.

One of the researches conducted this year is Gilad Brand's research, "The evolving structure of the Israeli labor market". This research examines the developments in the labor market since 1995 in terms of employment, output per employee in the different sectors. The study also analyzes the current labor demand and supply in various professions in order to identify the evolving trends among the various labor components. An analysis of demand and supply of labor in this study indicates that there is a shortage of skilled workers in the industry and construction professions. In contrast, in most professions in business and personal services

sector there is a surplus of workers. The shortage of workers in these industries is mainly in highly educated workers, while for the other workers in these industries the excess supply of unskilled workers in the service sector makes it difficult to integrate into the workforce.

An additional conclusion drawn from the study is that vocational training programs should not encourage workers integration in the Business services and Personal services. This is because recent data indicates that there is a surplus in unskilled workers in these sectors. Furthermore, the range of possible employment options for employees lacking an appropriate academic education is poor and offers low wages. This paper also includes an executive summary of a Position Paper on Vocational training for adults in Israel published by Dr Tal Lotan. This Position Paper presents a range of recommendations for professional training in Israel, with emphasis on cooperation and assistance from employers' organizations during the training period. Special attention is paid to the unique characteristics of the Israeli labor market. Labor participation data is presented, along with an international comparison. Segmentation of workers by economic sector and education level is carried out, providing a clear snapshot of professional training needs. Data regarding the labor participation of special populations within the Israeli society, especially minorities and Orthodox Jews is analyzed and used for formulating training policy recommendations. Another paper which is published in this booklet is Professor Adrian Ziderman's paper – "Financing Training through Payroll Levies". This paper refers not to the different types of vocational training but the ways of financing it. According to Prof. Ziderman, in over forty countries worldwide, levies on the payrolls of companies have become a principle source for financing skills training in specialized training institutions (often under the aegis of a national training authority) and for encouraging enterprise training without calling upon public funds. This paper provides a presentation of the types, purposes, pros and cons and efficacy of payroll levies and concludes with a discussion of practical issues of implementation.

In September a seminar on vocational training for adults was conducted in Nof-Ginosar. This event was the meeting point of important actors in the vocational training field; from the Ministry of Industry, Trade and Labor, the New Histadroot, Amal Network, Ort Network and more. Moreover, Kathrin Hoeckel from the OECD organization participated in the seminar and presented an international perspective on vocational training. During the seminar the steering committee members took part in a productive and comprehensive discussion, solutions and ideas were suggested for dealing with the challenges rising in the vocational training project, and other challenges were identified. The seminar's protocol and presentations are available in this booklet.

The evolving structure of the Israeli labor market

Executive Summary

Background

- Israel's integration into the global economy and its high rate of poverty, especially in families with one wage earner, continue to constitute a challenge for policymakers. Structural changes can be noticed as a result of an ongoing trend. These include a gradual increase in the services sector's share in domestic output, a gradual decrease in the importance of the industrial sector as a major employer, the growing weight of advanced industries in production and industrial exports, and a rapid increase in import/export share of GDP. The growing openness of the economy enables utilization of Israel's comparative advantages in exporting. Additionally, it facilitates importing of labor intensive goods from countries whose labor costs are low. The exposure of the Israeli economy to labor intensive competition from countries where wages are low continue to challenge the unskilled workers who find it difficult to integrate into the evolving structure of the labor force, and hence pay the price of integration into the global economy.

Employing historical time series data from the Israeli central bureau of statistics, we separate industries into internationally tradable and non tradable components⁵, allowing for employment and output trends at both the industry and the aggregate level to be examined. Using human resource surveys and employer surveys we also analyze the current labor demand and supply in various occupations in order to identify the different trends in the various labor components.

Findings

- The vast majority of the increase in employment in the Business Sector during the surveyed period (1995-2008) was among the non-tradable labor components (86%), most of which were in the business and personal services industry.
- Labor productivity rose substantially among the tradable labor components, an increase of 28% from 1995 to 2008 in terms of output per worker, far above the increase of 18% percent in the Business sector as a whole.

⁵ Non tradable refers to jobs that are location specific, meaning the worker is restricted to a specific location and the job cannot be performed in another geographical location. This is in contrast to a tradable profession, where the job can be transferred to any location.

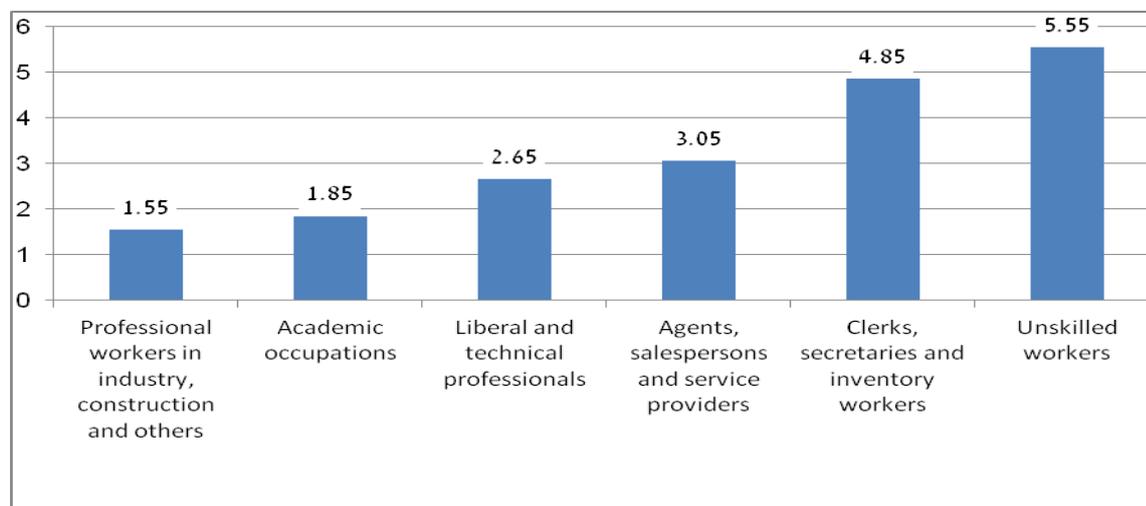
- Examining the advancement of output per worker, we found that among the tradable labor components productivity has grown nearly twice as fast as that in the non-tradable, thus creating a widening gap at an average rate of 0.9% per year between the different labor components.
- Since labor productivity is highly correlated with income, it explains the widening gaps in income distribution across large segments of the workforce.
- These trends of rapid growth in terms of jobs but not income among the non tradable labor components, and rapid growth in terms of income but not jobs among the tradable components, are expected to lead to a further increase in social inequality.
- Extensively discussed in the literature, this process is a direct result of global economic integration and is common in other developed countries.
- The rapid employment growth that was experienced in the non-tradable services is unsustainable since it depends only on local demand, which is inherently limited. Analysis of labor supply and demand shows there is an excess of workers in several employment fields which provide services to the domestic market. The tradable sector, however, can grow in an almost unconstrained manner as long as production at the prices determined in global markets is economically justified. The two sectors significantly depend on each other since tradable goods and services use non-tradable services. Therefore a decrease in tradable output will most likely lead to a decline in the demand for untradeable services. Therefore, the declining trend in the tradable sector may lead to lower employment rates in the entire economy.
- While globalization increases growth opportunities and living standards, it also causes the domestic economy to face stronger competition. This mechanism has exposed the Israeli economy to labor intensive competition from countries where wages are low. In addition, it has brought upon a structural change in production, whereby the demand for unskilled labor has decreased in the tradable industries and the return for it has diminished accordingly. As a result, the industrial sector's share of production has declined, which explains the economy's increasing reliance on the services sector which is less threatened by foreign competition.
- The unskilled labor force which has previously been employed in traditional industries is now employed in the non-tradable segment of the services sector. For example, we found that growth in the services sector is largely due to a sharp increase (64%) in low wage earners, far beyond the overall employment increase in the Business sector (37%). In fact, almost half of the workers who joined the Business and Personal services sectors are employed in safeguarding, cleaning and maintenance and food services occupations.

- Although the Business services industry is the fastest growing industry both in terms of its share in total domestic output and in terms of number of employees, when investigating the sector we observe two opposing effects. The increase in the share of the Business services industry in the domestic output is explained by the rapid growth of the high-tech field, but only 19% of the workers in the Business services industry hold professions in this field. The increase in the number of employees in the Business services industry is mostly explained by a sharp increase in the number of unskilled low paid workers.
- When we distinguish between workers in the information and communication technologies (ICT) occupations and the rest of the workers in Business services industry, we find that output and the average wage for a worker in Business services industry is relatively low, constituting roughly 70% of the average wage in the economy.
- The industrial sector has been streamlining since it started facing growing competition from abroad. This process is characterized by an increase in the total number of workers in the industrial sector and a rapid increase in labor productivity. These increases are partially due to rapid growth in the share of high-tech industries and a decline in the share of traditional industries.
- The trend will most likely continue in the future. When analyzing the industrial sector, we found that the elite technologies segment was among the occupations in which competitiveness in global markets has increased. Conversely, global competitiveness has decreased in traditional occupations.
- Analysis of labor supply and demand demonstrated that the numbers of applicants per job is inversely related to the applicants' level of professional training. For example, there are 5.5 job seekers per vacant position among unskilled workers. This ratio decreases as job seekers' education and professional training increases. Workers in academic professions and professional industrial/construction workers are at the upper end of the distribution, with 1.5 and 1.8 job seekers per vacant position, respectively. Labor demand is currently focusing mainly on skilled and educated workers, mostly in academic occupations, industrial professional occupations and in various professions in the construction sector.
- Our estimates show that currently there is a shortage of roughly 7,600 skilled workers, out of which 2,300 are in the industrial sector and 1,800 are in the construction sector. On the contrary, there is an excess supply of workers in occupations for which high skills are not required. Our estimates find that approximately 70,000 low skilled workers fail to integrate into the labor market because of excess supply of such workers.

**Ratio between supply and demand for selected occupations,
Quarter I, 2010 - Quarter II, 2011**

Supply is relatively lower than demand (job vacancies is higher than labor supply)	Workers shortage, quarterly average	Supply is relatively higher than demand	Excess workers, quarterly average
Computer engineers	1,689	Babysitters	13,342
Computer technicians	1,243	Cleaners	11,827
Floorers, stonemasons, plasterers, iron workers	1,496	Salespersons	10,292
Chemists, physicists, mathematicians	599	Teaching assistants in kindergartens and elementary schools	6,815
Electricity and electronic engineers	408	Secretaries	5,609
Civil engineers	343	Office clerks	5,601
Mechanical engineers	117	Packagers and sorters	4,387
Electronic technicians and practical engineers	291	Waiters	2,898
Mechanical technicians	246	Cashier	2,174
Tinsmiths, welders, metal goods workers	328	Billing workers	1,859
Out of which: microchip processors	292	Food industry workers	1,387
Laborers in plastic production	426	Safeguarding and security workers	1,199
Laborers in chemical products production	247	Deliverers and ushers	1,053
Laborers in electronic goods production	239	Office equipment operators	955
Total in the industrial sector	2,300	Other unskilled workers	824
Total in the construction sector	1,838	Total excess:	70,221
Total others	3,531		
Total	7,669		

Job seekers per job vacancies, by occupation, First half of 2011



Position Paper on Vocational training for Adults in Israel

Executive Summary

This paper presents a range of recommendations for professional training in Israel, with emphasis on cooperation and assistance from employers' organizations during the training period. Special attention is paid to the unique characteristics of the Israeli labor market. Labor participation data is presented, along with an international comparison. Segmentation of workers by economic sector and education level is carried out, providing a clear snapshot of professional training needs. Data regarding the labor participation of special populations within the Israeli society, especially minorities and Orthodox Jews is analyzed and used for formulating training policy recommendations.

Background

Israel's unique characteristics explain why employed individuals constitute a comparatively small fraction of the population. Most young individuals join the military when they reach 18 years of age and therefore do not participate in the labor force. Demographically, labor market participation among Orthodox Jewish males and minority females is significantly low. The rate of high-tech employment as a fraction of total employment is higher in Israel than in any European country – 9.7% of total employment is in the high-tech sector.

Employment data from the Central Bureau of Statistics (CBS) show that higher education levels lead to increased labor market participation, especially among seniors. The labor market participation rate for highly educated seniors (16 years of education or more) is more than twice higher than the overall participation rate for seniors. These data imply that labor market "academization" is taking place – education is becoming increasingly vital in the workplace.

The paper presents a segmentation of employees by occupation and years of education. The highest employment rates are in the industrial sector and in the commercial services sector. Employees in these sectors are significantly more educated than, for example, employees in the construction sector.

The Israeli society is highly heterogenic compared to most other modern western economies. Poverty is far from being a uniform phenomenon across different demographic segments of the population. The majority of poor families are Orthodox Jews and minorities, while these groups constitute only roughly a quarter of the entire population. These high poverty rates are

a result of a very low labor market participation rate among these segments, employment discrimination, cultural differences, high fertility rates, the military service barrier, and other reasons.

The main governmental institution responsible for administering and operating professional training is the Department of Professional Training at the Ministry of Industry, Trade and Labor (ITL). The main tools which the department is currently using include:

- Daytime and evening professional training, which provides a government diploma upon successful completion.
- Industrial training for new employees via workshops in factories and/or on the job training.
- Training for technicians and practical engineers.

The most prevalent tool for financing professional training is the voucher system. The voucher ceiling is 80% of the cost of taking the training course, up to a maximum of 7,000 NIS. The payment system is cleverly engineered to provide an incentive to complete the training course followed by successful labor market integration. The payment for the course is received by the trainee in three steps – after registering for the course, upon completing the course and following three months of work experience. With 51% of trainees integrating into the labor market at the occupation in which they were trained, this system has been relatively successful so far in providing adequate matching between workers and employers in the labor market.

The budget of the Department of Professional Training has decreased significantly over the years from 159.4 million NIS in 2000 to 61 million NIS in 2010. Moreover, the budget has declined even more in 2011, amounting to only 44 million NIS. Unemployment benefits have simultaneously decreased and the requirements for eligibility have been changed. Unemployed trainees do not receive unemployment benefits during their training period, which distorts their choice of joining a training program by weakening the incentive to attend a program and forgo unemployment transfer payments.

Implications and Recommendations

Implications and recommendations for professional training, given current estimations and projections of employment and training are presented. The main recommendations include:

1. Identifying the human resources needs of the economy and the industry, emphasizing sustainability and long run planning. The government should be responsible for outlining needs and trends in the labor market, and it can use the CBS, researchers at the Ministry of

ITL, or any other government institution. Employers and academicians should be highly involved in this process.

2. Developing and validating programs, professions and training opportunities according to the economy's needs and scarcities. The choice of occupations in which professional training is offered should be derived from technological changes and innovations. Coordination and cooperation with employers should take place using representatives from the employers' side and from the Department of Professional Training.
3. Providing the required skills for future entry into the labor market. For example, self-learning abilities, team work and cooperation, technological entrepreneurship, creativity and innovativeness, oral and written presentation skills, time management and flexibility, decision making under uncertainty, and codes of conduct.
4. Establishing and upgrading training centers, including regional multi-age, multidisciplinary technological centers. The ongoing neglect and budgetary decreases have led to an absence of adequate equipment for proper training. There is a shortage of training equipment in the Ministry of Education's technological education and training centers. Therefore, resource pooling infrastructural solutions which will serve all training systems should be adopted.
5. Supporting professional trainers and teachers using continuing education programs and sabbatical years for teachers in their fields of expertise. Having professional and updated trainers who are constantly exposed to the changing requirements in the labor market is a necessary condition for the effectiveness of professional training. Hence, investing in teachers and trainers is the most efficient long term investment for achieving higher labor market participation and better matching between workers and employers.
6. Initiating campaigns for labor encouragement and for improving the public image of education and technological training among students, parents and policymakers. These campaigns should be carried out jointly by the government and the employers' organizations.
7. Establishing a public council for education and technological training. The council should be cooperatively founded by the Ministry of Education, the Ministry of ITL, technological education institutions, employers' organizations, members of the academia, the Histadrut and the military. The objectives of the council will include determining policies and strategies regarding technological education, outlining operative plans, promoting research in technological education and planning future policies according to labor market projections.

Recommendations regarding the timing and location of professional training programs are presented and include the following two categories:

- Basic professional training prior to employment.

- Training should take place in accordance with employers' human resource needs, with emphasis on occupations in which there is an acute labor shortage. This will encourage better matching upon completion of the training period.
- There should be two stages of training - a general training stage, which will take place in the training center, followed by an internship at the designated workplace.
- Monetary allowances during the training period and government financing of training programs are required for encouraging participation in professional training programs.
- Life-long learning at the workplace.
- Many firms use various training methods, commonly applying advanced technologies such as E-learning. Small and medium businesses, however, often do not have an organized mechanism for employee training.
- A regularized institution which will provide the funds required for financing adequate professional on the job training will assist smaller businesses in training and providing human capital at the workplace.

Financing Training through Payroll Levies⁶

Prof. Adrian Ziderman

**Sir Isaac Wolfson Professor of Economics & Business Administration
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1. Introduction

Earmarked levies on enterprise payrolls have emerged as the most widely adopted funding mechanism for financing training, both in public training institutions (usually under the aegis of a national training authority) and in commercial enterprises. Usually set at around one percent of total wages disbursements, training levies are central to training-finance policies in many countries round the world, both developing countries and industrialized economies. There are two major types of training levy, reflecting rather different objectives served. The more traditional, revenue-generating schemes (often referred to as the Latin-American model, after its origin in that region), are concerned with generating revenues to finance training provided by the public sector. The newer, levy-grant schemes aim at encouraging in-plant provision of training by firms themselves, through financial incentives that are funded through the training levy. Given the centrality of payroll levies in training finance, this chapter provides a presentation of the types, purposes, pros and cons and efficacy of payroll levies and concludes with a discussion of practical issues of implementation. Illustrations are provided from the working of payroll levy schemes round the world, with particular attention to the lesser-known cases in African countries.⁷

2. Alternative Training Levy Schemes

We have noted the usual division of national payroll tax schemes into two distinct groups, reflecting very different underlying objectives: revenue generation schemes (where levy proceeds are used to finance training provided by public sector institutions) and levy-grant schemes (aimed at encouraging training investment by firms themselves). However, this traditional dichotomy is becoming somewhat outdated as evolving levy schemes begin to take on a broader range of tasks, particularly in the context of the development of national training

⁶Previously published on: International Handbook of Education for a Changing World of Work: Bridging Academic and Vocational Learning, Rupert Maclean and David N. Wilson (Editors), UNEVOC and Springer, 2009.

⁷ This paper draws heavily on earlier papers written by the author, particularly: Whalley and Ziderman (1990), Ziderman (1994) and Ziderman (2003),

funds and training authorities. While many schemes, as we shall show, both finance public sector institutions and offer incentives for enterprise training, this distinction, nevertheless, remains a useful analytical device. There are some cases of dual-objective, mixed schemes; but for most schemes, the main thrust remains in one of these two directions.

2.1 Payroll Levies: Revenue Generation

In levy schemes within this grouping, levy proceeds are used mainly to support public sector training provision, provided either by the state or a national training authority; the emphasis is on initial training at formal public training institutions. Such schemes are found typically in Latin America and Caribbean countries. Payroll levy schemes of this type may be seen as a mechanism for greater funding diversification, lightening the burden of training funding falling on the state. In addition to generating more funding for training, levies of this type may offer a more stable form of funding than is forthcoming from government allocations.

First introduced in Brazil in the early 1940s, payroll levies of this type are in place in over a dozen countries in that region (Galhardi, 2002). This arrangement has spread to other continents. For example the payroll levy scheme supporting Vocational Education and Training Authority (VETA) in Tanzania is of this type. The bulk of funding goes towards the finance of VETA public training centers; financial support is also provided for the national trades testing system.

Revenues from these levies have been employed to build up national training systems, usually run by a quasi-autonomous national training authority which, at its own training centers, provides a wide range of pre-employment and in-service training courses for manual workers, office workers and managers.

2.2 Levy-Grant Schemes

Unlike revenue generation schemes aimed at financing training institutions mainly in the public sector, levy-grant schemes focus on company in-service training. They create incentives for a firm to invest more in the skills development of its work force, be it in the sphere of training on-the-job (setting up or extending and improving existing company training) or by sending workers to train externally. The need for government intervention, via the introduction of levy-grant arrangements, arises because of shortcomings in the amount and/or quality of enterprise training. Such schemes are in place worldwide. They are to be found in industrial countries (such as France and New Zealand), transitional economies

(Hungary) and in developing countries such as in Africa (Zimbabwe and South Africa) and Asia (Malaysia and Singapore). While there are numerous variants, Gasskov's three-fold classification of various types of levy-grant schemes has been widely adopted and is presented here (Gasskov 1994). He distinguishes between schemes concerned with cost reimbursement, cost redistribution (for which he employs the more general term 'levy-grant') and levy-exemption.

2.2.1 Cost Reimbursement

Under this type of levy-grant scheme, grants are made to firms who undertake certain designated forms of training (both on and off-the-job), on a cost-incurred basis. These training grants are financed by the revenues generated by the payroll levy.

The purpose of these levy schemes is often misunderstood, particularly among employers. The scheme aims not at reimbursement of the levy as such, but rather reimbursement of training expenditures incurred (to encourage firms to train more or better). Thus a training expenditure reimbursement ceiling is usually set, up to a given percentage of the levy paid. Firms that train to acceptable standards will receive back part of the levy paid, as grants; non-training firms are penalized by loss of the levy. The scheme usually could, in theory, provide for full reimbursement of the levy contribution (particularly where a large number of firms do not train and claim). In practice, reimbursement is set below the value of the levy paid, because of central administration costs and, particularly when run by a national training authority, where there are central expenditures, financed by the levy, on other training services.

The payroll levy serving the Nigerian Industrial Training Fund provides a veteran example of a cost reimbursement scheme. In addition to running the reimbursement scheme, the Fund finances and operates a number of its own training centers and its staff provides regular assistance to firms in identifying training needs and developing training plans (Gasskov, 1994). Because of these other calls on levy income, plus the cost of supporting the Fund's large bureaucracy, firms generally can qualify for cost reimbursements of not more than 60 percent of the levy paid; in practice, less than 15 percent of firms request training cost reimbursement.

2.2.2 Cost Redistribution

This variant differs from cost reimbursement in that it aims at redistributing the burden of training expenditures amongst enterprises. Designed in particular to deal with the ill-effects on training supply of the poaching of skilled workers by non-training firms, the mechanism provides for a sharper redistribution of levy funds, away from companies who do not train, towards those who do. Since the emphasis is on the redistribution of cost burdens, training companies may receive grants far in excess of the amount of levy paid and thus providing strong incentives for firms to train. Such cost redistribution schemes act most strongly where the bulk of levy proceeds is redistributed back to firms as grants and not used for other (albeit training) purposes by the collection organization, be it the state or a national training agency.

The classic example of this redistribution mechanism is the faulted system of industrial training board levies in the United Kingdom. This levy-grant scheme, introduced under the 1964 Industrial Training Act, was the most comprehensive levy-grant scheme ever to be implemented. Some 30 industrial training boards were established, each with statutory powers to exact a levy from firms within its jurisdiction. In the largest of the boards, in the engineering industry, the training levy was set at a rate (2.5 percent of payroll), sufficiently high to result in total levy proceeds approximating total annual training investments by all firms in the industry. This sum was then distributed back only to training firms, according to particular formulae designed to measure company training efforts; firms that did little or no training would contribute towards the training costs of firms that training substantial numbers of workers. While adopted successfully in other countries (New Zealand and the Republic of Ireland) the UK scheme proved to be overambitious and unwieldy and was dismantled within two decades. Ziderman (1978) provides a critical review of the workings of the Act.

2.2.3 Levy-Exemption

Arrangements for levy-exemption are usually part of broader cost reimbursement schemes, whereby firms adequately meeting their training needs are allowed to withdraw from the levy-grant system or at least to benefit from reduced levy assessments in proportion to their recognized training investments. A major advantage is that firms are freed from the bureaucratic fatigues of levy payment and grant claim, and potential cash flow problems are avoided. This mechanism is found more typically in certain industrialized economies rather than in developing countries. Levy-exemption is present in the two payroll levies that fall of companies in France (the training tax and the apprenticeship tax). The Cote d'Ivoire scheme constitutes an example of levy exemption arrangements in a developing country.

The Continuing Vocational Training (CVT) tax in Cote d'Ivoire is the main revenue source for the national training fund (Fonds de Developpement de la Formation Professionnelle – the Fund). Under the CVT tax, firms are required to pay 1.2 percent of payroll (in addition, there is an apprenticeship tax of 0.4 percent of payroll). Firms may receive tax exemption of half their CVT tax obligations (0.6 percent) on submission, and Fund pre-approval, of a company training plan (including training within and outside the firm), utilizing retained payroll tax obligations. There is an additional incentive element built into the CVT system. Firms have the possibility of retaining up to an additional 50 percent of exempted payroll tax payments (0.9 percent of payroll instead of 0.6 percent). To do so, they must submit and implement training plans for three years and justify training expenditures beyond 1.6 percent of payroll; only a few percent of firms avail themselves of this possibility.

2.3 Mixed Schemes

The division between countries with revenue-raising schemes and those operating disbursement schemes is analytically useful; yet, as with many institutional generalizations, the distinction should not be pressed too far. Countries may seek dual objectives from payroll levy schemes which, in practice, may incorporate elements of both approaches.

The Mauritius scheme is an example of a dual-objective scheme. While about half of levy proceeds traditionally has been assigned to support public training institutions, some 25 percent has been reimbursed back to firms, a proportion that has been rising more recently to about 40 percent.

In a number of Latin American countries, national training authorities (funded by payroll levies), have broadened their traditional role as training providers, to become outward-oriented, encompassing the promotion and guidance of training activities in outside enterprises. Colombia, Peru and Paraguay provide examples of this complementary approach. (Duchi, 1997).

Many levy-grants schemes contain elements of revenue generation. Nigeria presents a clear case of dual objectives. The National Training Fund, established in 1971, is funded mainly by a one percent payroll levy, with additional financial support from federal government budgets. While the central activity of the Fund is the encouragement of companies to invest in the skills development of their employees through the offer of training grants, in 1979 it opened

its first vocational training center. Though operated on a very much smaller scale than its levy-grant activities, the Fund has continued to expand its direct training activities.

The levy-grant schemes in Kenya, the Cote d'Ivoire and South Africa all display elements of revenue generation activities. In both the Cote d'Ivoire and South African levy-grant schemes, part of levy income is designated for the financing of national training activities that are usually regarded as the concern of government. In Cote d'Ivoire, some 30 percent of CVT tax proceeds (net of tax obligations retained by firms) has been assigned for financing training proposals submitted by NGOs, local communities and informal sector groups. Levy funds allocated to training for the informal sector has risen to some 20 percent of Fund allocations for training. The cross-subsidization of informal sector training by levy funds raised from formal sector enterprises is unusual but is matched in provisions in the levy-grant arrangements in South Africa. In South Africa 20 percent of the revenues from the skills development levies on company payrolls are credited to the National Skills Fund for across-sector strategic training initiatives and for the training of disadvantaged groups, activities which are generally funded from central government budgets.

3. Rationale: The 'Benefit Principle'

Neither public finance experts nor Treasury officials are enamored of earmarked taxes (for training or otherwise); it is argued that they constrain the freedom of public officials to allocate public revenues on an annual, *ad hoc* basis according to current priorities. And many companies, claiming to see little benefit coming their way from a payroll levy scheme, point to the levy as constituting 'just another tax'.

There is now a sizeable literature (beyond the scope of this paper) that attempts to identify the essential nature of payroll levies and to seek a theoretical justification for their imposition. One rationale for payroll levies, which has been fairly widely quoted – though not necessarily accepted - sees payroll taxation as a form of 'reverse social security' (Whalley and Ziderman 1990). Based mainly on empirical literature from industrialized countries, it is argued that at least part of the incidence of a payroll levy is shifted onto workers in the form of lower wages. It is in this sense that a payroll levy scheme, earmarked for training, may be regarded as equivalent to a reverse social security scheme: the worker receives benefits in the form of training on entry into the labor market (or during the earlier years) and contributions are made subsequently over the working life. The relevance of this approach, even if broadly accepted, will depend on how far individual tax 'payments' match the training benefits received. This in

turn will depend on how equitably training opportunities are spread amongst workers, which, of course, will differ from country case to case.

At a more pragmatic level, there probably would be wide agreement on the following proposition. Most payroll levy schemes, whether revenue generating or levy-grant, are largely used to finance training that is relevant (directly or indirectly) to the needs of the companies that pay the levy. In levy-grant schemes enterprises may claim back part of training costs incurred, while in countries where enterprise training is weak or undeveloped, levies are used to finance public training institutions which provide skills for the formal sector. In this sense, training levy schemes may be regarded loosely as examples of benefit taxation, where tax-paying individuals or institutions are major beneficiaries of the uses to which the taxes are put.

Perhaps the most quoted, non training-related, argument against the imposition of payroll levies is that, in raising the price of labor, they lead to a substitution towards more capital-using production methods and to lower employment. It is unlikely that this argument bears any weight in practice. Even where there is no tax shifting onto workers in terms of lower relative wages, a small addition to labor costs (usually only of one percent) is highly unlikely to affect wage employment significantly, except on the margin.

4. Coverage

Coverage of payroll levy schemes varies considerable from country to country, both in terms size of firm included in the scheme and of sectoral coverage.

Most schemes define eligibility in terms of firm size, usually exempting small firms. While the Nigerian scheme includes enterprises with 25 workers or more and those with ten or more workers in Colombia, most schemes are more comprehensive in coverage. Those in Kenya and Tanzania exclude all employers with three or less workers, and firms with less than five workers are exempted in Honduras, Peru and Venezuela. All enterprises are covered in the Mauritius and South African schemes. In Costa Rica and Honduras, exemption may be claimed on the basis of capital assets.

The efficacy of such broad coverage in many developing country schemes is questionable. In practice, the bulk of revenue is collected from the minority of large and medium-sized firms. The relatively large number of micro-enterprises, the blurred definition of the informal sector

and the difficulties of small-firm identification, registration and levy collection, all combine to result in considerable non-compliance in many countries. Legislation provides for fines and/or imprisonment for non-payment in most countries; but these measures are either generally not employed (as was the case in Tanzania until the reversal in policy in this regard, introduced in 2001) or not applied to very small firms. The reason is clear: in very many cases it is simply not cost-effective to follow up on small firms through litigation or even through dispatching inspector/collectors. But considerable non-compliance brings the law (and the levy scheme) into disrepute and beams negative signals to complying firms regarding continuing levy payment. A strong case can be made out for raising the minimum firm size for inclusion in payroll levy schemes in developing countries with large informal sectors.

In many schemes small firms are excluded both because inclusion would not be practical (in terms of levy collection) but also because it may not be justified, particularly in the case of levy-grant schemes. The administrative costs of applying for grants may be disproportionately high for small firms. Moreover, the training needs of very small firms differ from those of larger firms, in terms both of expenditures (in relation to operating costs) and type of training; much of the training for which rebates may be obtained in many schemes is not very relevant to very small firms. Increasingly, financing schemes are being put in place in various developing countries (Kenya, Ghana, for example) to deal with the needs of micro-enterprises and informal sector firms; but these tend to be based on subsidy (usually from government and donors) rather than on levy-grant approaches.

Countries differ in the sectors covered by the levy. Agriculture is usually excluded and most schemes exempt the public sector (Mauritius, Tanzania, for example), which results in a cross-subsidization of training for public sector employees by the private sector, to the extent that levies finance public training institutions. In some countries (such as in Colombia and Honduras), the government sector is included but levied at a lower rate. In South Africa, central and provincial government remains outside the purview of the training levy legislation, but government departments are required to budget one percent of personnel costs for skills development.

Given the extent of sectoral coverage, some countries operate a number of sectoral-based schemes, rather than a unified national scheme. The leading example was the former industrial training board system operating in the UK. Sector-based schemes have met with varying levels of success and, clearly, their main advantage is that they offer a means of

tailoring the levy format to the specific characteristics and needs of the sector in question. The disadvantage of sectoral levies is their narrow focus obviating an integrated, national approach to the finance and planning of skills development. Most countries have opted for standard, national-level levy schemes.

5. Avoiding the Misuse of Payroll Levy Revenues

Payroll levies have been a stable form of funding for training in many countries and have brought additional funding to the public sector. However, there are a small number of notable cases where the payroll levy system has not resulted in more training because levy proceeds have been dissipated into general government revenues. This is the case in Gabon, Togo and, for a period, in Cote d'Ivoire, leading to a collapse of the respective training funds that they financed.

Payroll levies may constitute an *over*-sheltered source of funding leading to unspent surpluses (Dougherty and Tan 1991). The Zimbabwe scheme has resulted in income generation far in excess of cost reimbursement demands, leading to questionable forays into fields very loosely related to the objectives of the scheme. Surpluses generated by the scheme in Mauritius have led to a drastic cutting of complementary government funding for the training fund. The initial levy rate may be set too high, especially in the case of cost reimbursement schemes or a rate that may have been appropriate at one time is not revised downwards as financing needs change. In Nigeria the levy rate, initially set at three percent in 1971, was reduced subsequently to the current rate of one percent four years later. Surpluses may lead to inefficiencies and top-heavy bureaucracies; alternatively they may lead to the use of payroll tax revenues for purposes other than training. Herein lies the role of strong controlling boards, representing the major stakeholder interests, to monitor the system and to ensure that abuse does not ensue.

The root of the problem, however, arises from the arbitrary way in which levy rates are fixed and in the inflexibilities of the system (with the tax rate often enshrined in the legislation setting up the scheme). In the initial stages of setting up a scheme, only too frequently the levy rate is fixed arbitrarily. Often, the pragmatic approach adopted is to ask how much the system (i.e. employers) will bear and to emulate current rates in other countries, rather than to estimate revenue needs (which may change in the future), from which an initial tax rate is derived. This highlights the basic dilemma: how may a payroll tax system be fashioned to be flexible enough to respond to changing expenditure needs (and avoid surpluses), without

forgoing the benefit of stable funding? It would be advisable to include within the enabling legislation a requirement to review the levy rate periodically (say every four to five years) but to guarantee a stable levy rate between revision dates

6. Enhancing Enterprise Training

Payroll levies have been a useful device in offering incentives for the development and strengthening of enterprise training. Training grants (financed from payroll levies) are employed in many countries to counter a tendency for firms to under train. In these cases, direct training subsidies are provided as part of a levy-grant system. Two alternatives are available in the form of the direct subsidy of enterprise training by the government or of indirect subsidies offered through concessions on company tax obligations for firms that train. In this section we compare these three forms of incentives for enhancing company training and consider how far they may be successful in improving training outcomes of enterprises.

6.1 Direct Training Subsidies: Government Grants v. Levy-grant Schemes

Some countries offer direct subsidies (out of public funds) to encourage company training; in what ways does this differ from cost reimbursement, as part of a levy-grant scheme? With a government subsidy scheme, incentives may be indirect and insufficiently focused, failing to catch the attention of senior management. Perhaps too much reliance is placed on the initiative of the individual firms involved – in knowing that the subsidy scheme exists and that the firm is eligible for subsidy and in overcoming company lethargy and committing to the burdensome process of involvement in the scheme. But in the case of levy-grant schemes, ‘involvement’ is assured automatically by the compulsory payment of the levy; anecdotal evidence suggests that senior company finance officers may tend to exert pressure on the training function to ensure that “we get back the levy”, through appropriate training provision.

Moreover, there are likely to be positive longer-term effects from a regime of levy-grants. The experience of the former UK industrial training levy-grant system was that, in time, the process did exert the beneficial effect of increasing training consciousness in the firm; the training function, as a generator of income, moves more towards center stage in the firm’s operations. Finally, we shall argue that one advantage of a well developed levy-grant scheme over direct government subsidies is that the former is better positioned to adopt a structured, comprehensive approach to training, rather than a more *ad hoc* one. The central lacunae in training under-provision is not only that amount of training provided is too low, but also that it is often piecemeal and not sufficiently well integrated.

6.2 Indirect Subsidies: Company Tax Concessions

In most countries, training expenses incurred by companies are tax deductible. The tax treatment of training expenditures (a form of human capital investment) is typically more favorable than that of machinery and equipment (Dougherty and Tan 1991). Training expenses are tax deductible immediately, whereas physical assets are tax deductible only in installments, over a number of years, through depreciation allowances. However, a training incentive may be given in the form of further tax concessions for company training expenditures, in addition to the usual deduction of training expenses for tax purposes: we refer to these as ‘company tax concessions.’

The generally successful and extant scheme in Chile is often quoted as an example of the use of company tax credits as an incentive device for enterprise training. However, there are number of (lesser-known) examples; generally, they have proved to be unsuccessful.

Brazil and South Africa constitute two notable instances of failed and phased out tax concession schemes. The South African scheme, established under legislation in the 1970s, allowed for the deduction of 200 percent of training expenditures (reduced to 150 percent in 1984), thus effectively reducing training costs of profitable firms by half (at a corporation tax rate of 50 percent). The scheme was faulted by “gross abuse” of the concession by employers and difficulties in policing claims. Moreover, employer uptake was very low; well under one percent of firms in the country claimed these tax concessions for in-service training..

The Mauritius scheme is unusual in that it operates in tandem with a levy grant scheme. The presence of two schemes together is not unique – Brazil, for example, also operated both schemes in parallel. What is unusual is the close integration of the two schemes. Overall, the administrative and supervisory costs of the scheme are unnecessarily high, it has led to conflict over the interpretation of the rules governing the interrelationship of the two schemes and as a consequence the reimbursement element of the levy-grant scheme has remained small.

The major problems with tax concession schemes are simply stated. A pre-requisite for the introduction of the scheme is a well-developed and broadly-based system of corporate taxation, not usually present in many developing. Firms with low profits and perhaps poor training capacity do not benefit and are not encouraged to train. Tax concession schemes only offer benefits to stronger, profitable firms. And unlike levy-grant schemes, it is the

government that bears the cost of these schemes in the form of lost tax revenues; in this sense they are akin to direct training subsidies by the government and may be regarded as representing ‘subsidies in disguise’.

6.3 Mechanisms for Encouraging Enterprise Training: Strengths and Weaknesses

While sharing some common weaknesses, the three mechanisms are not equally efficacious. Table 1 lists some of the major weaknesses and, if any, notable advantages of each approach. A major advantage of levy-grant systems is that they do not draw on public funds, a point of some importance in times of parsimonious government budgets; in addition (as discussed above) they can lead to more systematic, structured enterprise training (though often are not designed to do so). The disadvantages of tax concession schemes militate against their adoption, in other than a very few countries.

Table 1: Mechanisms for Encouraging Enterprise Training: Strengths and Weaknesses

Weaknesses	Notable Strengths	Mechanism
	<p>Costs do not fall on public budgets – they are met by enterprises (or, with incidence shifting, by workers)</p> <p>Can facilitate a more systematic, structured approach to enterprise training</p>	<p>Levy-grant systems</p>
<p>Cost burden falls on public budgets (increased expenditures)</p>		<p>General training subsidies</p>
<p>Requires a well-developed and broadly-based system of corporate taxation</p> <p>Cost burden of the scheme falls largely on public budgets (reduced tax revenues)</p> <p>Responsiveness of firms is low in those economies where few firms earn sufficient profits to benefit from the tax exemptions</p>		<p>Company tax concessions</p>

Source: Ziderman (2003)

7. What Forms of Training Should a Levy-Grant Scheme Support?

7.1 Training Off or On-the-Job?

Enterprise training can take on many forms. Training may be provided in the form of apprenticeship (often divided between training on-the-job and the attendance at courses provided at outside training institution). It may be given wholly on-the-job as initial or continuing formal training, or training may be less formal and ad hoc, though not necessarily less important to the skills development of the firm. It may be provided off-the-job, in the form of formal courses, for workers, management or professionals at specialized training

institutions. There is a dilemma here. It may be important to encourage certain forms of on-the-job training but these may be expensive to monitor for quality, and abuse may be difficult to detect. Other forms of training, such as those for professional qualification at recognized external institutions may more readily be subject to surveillance but are not always of highest priority for the firm. This may explain the focus of a number of levy grant schemes. Apart from apprenticeship training, which is largely in decline, most training that is recognized for cost reimbursement in the Zimbabwe scheme, is training for upgrading or professional qualifications at external institutions; more hands-on, practical training does not receive sizeable support. Similar considerations seem to apply to the Kenyan scheme.

7.2 Systems Approach v. Piecemeal Reimbursement

A related issue is the breadth of the overall program of training supported by a levy-grant scheme within a firm and its sustainability over the longer term. We may recognize two contrasting approaches here. One – we may label this as the ‘external approach’ - is typified in the Zimbabwe scheme. Here, a detailed list is produced of approved forms of training and courses that are eligible for rebates; firms are then invited to apply for cost reimbursement for those forms of (mainly external) training it has sponsored and which match items on the approved list. But this approach, while offering rebates to firms for certain forms of training and probably encouraging firms to train more (in designated eligible areas) is unlikely to have more than a limited, short-term impact on skills development in the firm and may indeed distort the balance of forms of training provision within the enterprise. This is because it gives recognition, and financial support, to more standard forms of training – usually provided externally to the firm - that are more readily recognized and easily monitored (and thus countering potential financial abuse) rather than to supporting more needed forms of training, varying across firms and often less formal or standardized, which is lacking in individual enterprises.

An alternative, ‘systems’ approach takes a broader view. In Cote d’Ivoire, levy exemption and cost reimbursement are contingent on the preparation, and approval by the Fund, of a company training plan. In the Nigerian case, grant payment is conditional on the firm adopting a systematic approach to training based on given criteria; thus firms are encouraged to begin to think systematically through preparing a training program, defined in terms of their real skill needs, rather than applying for rebates on a purely *ad hoc*, short term basis. This more progressive approach has also been adopted within the framework of new funding arrangements put in place in recent years in South Africa.

8. Payroll Levies: A Balance Sheet of Advantages and Limitations

Payroll taxes, usually levied as a percentage of company payrolls, are now established throughout the world as the most pervasive mechanism employed for funding training systems. In this policy-oriented section, we draw up a balance sheet, setting out the strengths and advantages of training levies against their possible dangers and limitations (Table 2). This listing is then followed by a discussion of key issues in training levy design and implementation that may be crucial factors in augmenting the benefits to be secured from training levies, while limiting – if not some eliminating – some of their weaknesses.

Table 2: Payroll Levies: Advantages and Limitations

Limitations	Advantages
<p>Given their particular training needs, many firms, particularly small ones, do not benefit from the scheme; this breeds resentment, opposition and compromises the status of training levies as “benefit taxation”</p> <p>Earmarked taxation do not conform well with the principles of sound public finance and weaken attempts to unify the national tax system</p> <p>Under fiscal pressure, government may incorporate training levy proceeds into general public tax revenues</p> <p>Levy proceeds may be diverted to non-training uses</p> <p>Payroll levies may constitute an over-sheltered source of funding, leading to unspent surpluses, inefficiencies and top-heavy bureaucracies</p> <p>Payroll levies raise the cost of labor to the employer, possibly discouraging employment</p> <p>Employers may shift the incidence of the levy on to workers in the form of lowered wages; in this case, workers and not the employers bear the burden of the tax</p>	<p>Diversifies the revenue base for financing training, by mobilizing additional revenues</p> <p>Can provide a stable and protected source of funding for national training provision; this is particularly important in the context of national budgetary instability</p> <p>Where forming part of a levy-grant system, can encourage firms to intensify their training efforts, increase training capacity and raise training quality</p> <p>A strong case can be made for viewing earmarked payroll levies as “benefit taxation”</p> <p>Training levies collected from formal sector employers can serve as a vehicle for cross subsidization of training , especially from the formal to the informal sector</p>

Source: Ziderman (2003)

9. Issues in Levy Scheme Design

Table 3 summarizes a number of crucial issues in payroll levy scheme design and implementation that have been raised in this paper; they are discussed more fully in Ziderman (2003). Failure to pay due attention to these issues is likely to compromise the prospects for successful operation of a payroll levy scheme.

Table 3: Issues in Levy Scheme Design and Implementation

Commentary	Issue
Levy rates to be subject by law to periodic review to avoid accumulation of surpluses	Levy rate
Levies, where feasible, should vary across sector and industry to reflect differing skill composition of the labour force and training needs.	National or sectoral levy rates
Levy coverage should be as wide as possible across economic sectors and to include public enterprises, NGOs etc.	Sectoral coverage
Very small firms should be exempt from levy payment, on both efficiency and equity grounds	Company size
Levy collection should be placed in the hands of effective agents; self-collection by funding organization to be avoided	Levy collection
Special attention should be given to guarding levy revenues from raiding by the government (especially where tax authorities act as the collection agent), by placing in special, closed accounts	Security of levy proceeds
Employers should be involved in payroll levy policy formation and execution	Employers buy-in
Payroll levies may be inappropriate where levy-income generating capacity is weak - either because of the limited size of the formal sector or administrative/organizational difficulties of levy collection	Avoidance of premature introduction of payroll levies

Source: Ziderman (2003)

10. Concluding Remarks

In over forty countries worldwide, levies on the payrolls of companies have become a principle source for financing skills training in specialized training institutions (often under the aegis of a national training authority) and for encouraging enterprise training without calling upon public funds. An attraction of these levies is they form a sheltered source of funding for training, as well as more generally offering a means of mobilizing funds otherwise inaccessible to the public sector. While there is a general predisposition to regard earmarked taxes as unnecessarily constraining on governments, payroll levies can act as an insulator against economic uncertainty and budgetary parsimony, in situations where it is societally desirable to take a longer term view. The provision of skills to meet the needs of economic growth and technological change may constitute a case in point. Be that as it may, this method of training finance has emerged as the most widely adopted alternative to government budgetary allocations.

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Annex: Presentations

"Learning for Jobs" - An International Perspective on Vocational Education and Training for Adults - Kathrin Hoeckel

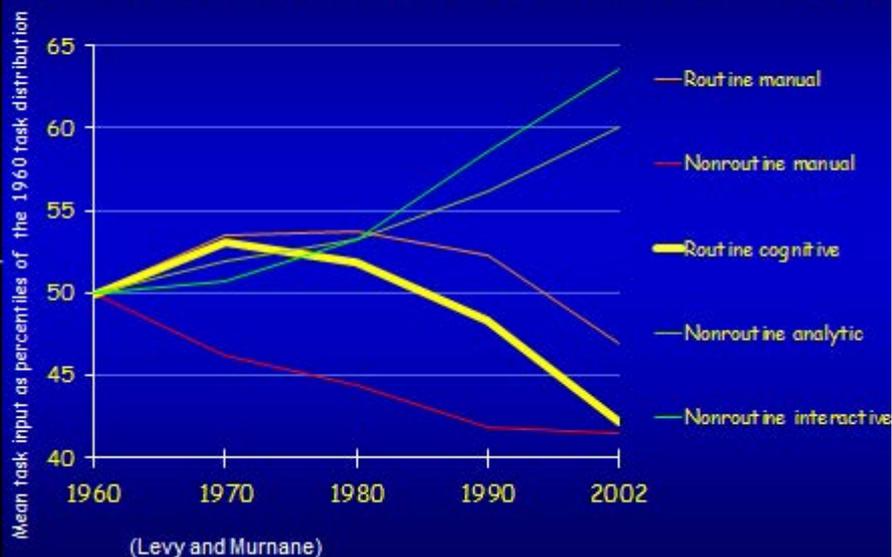


Let's talk about...

- changes in demand for skills and participation in learning,
- how to ensure that the right people get access to adult education and training,
- how to ensure that vocational education and training (VET) provision is relevant for the economy, and
- evidence supporting the matching of skills supply and labour market needs.

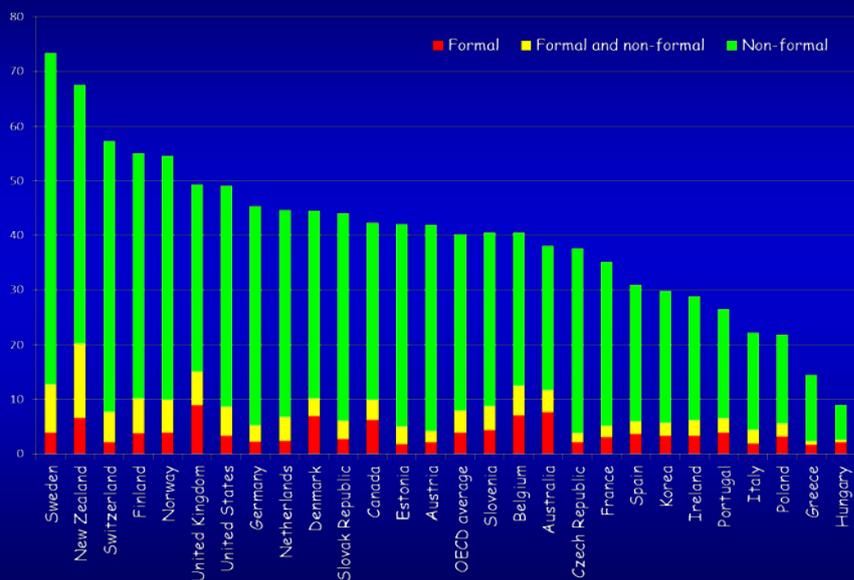
How the demand for skills has changed

Economy-wide measures of routine and non-routine task input (US)



Lifelong learning is not a reality for all

Participation in adult learning



6

Adults are more likely to participate in learning if they are...

- younger,
- better educated,
- their skills are better matched.

8

How to make adult learning accessible

By designing clear structures and flexible provision

- Qualifications frameworks
- Certification of prior learning

- Modular provision of programmes
- Working and learning part-time

- A seamless VET system
Example: Australia

By supporting skills development in SMEs

- Reasons why SMEs offer less training:
 - Lack of time and resources
 - Complicated paper work
 - Lack of human resource management skills
 - Lack of awareness and information

- Possible solution: partnerships between local SMEs

How to make adult learning relevant

Engaging the social partners

Looking at the Swiss model:

VET curricula are developed by professional organisations and approved by the government

Workplace-based training is a mandatory part of VET programmes in Switzerland

VET teachers and trainers/supervisors in the industry are well prepared

Engaging the social partners

Looking at the Swiss model:

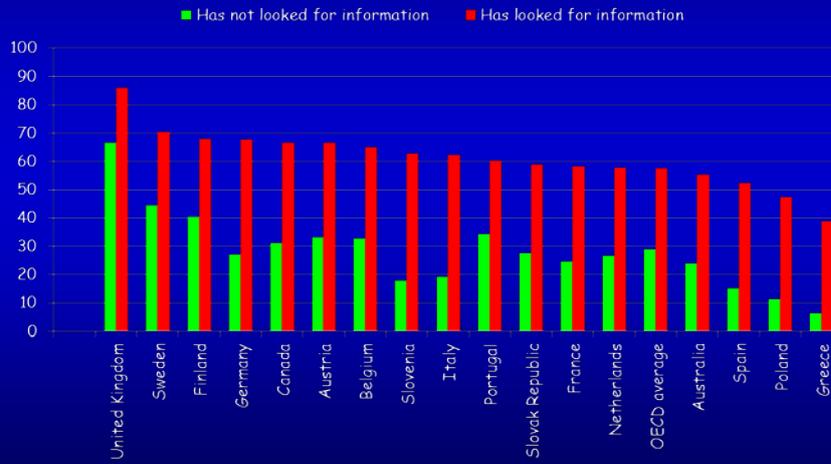
Labour market outcomes of adult VET are on average better than for university graduates.

According to a 2004 cost-benefit analysis, the gross benefit of employer involvement in VET in Switzerland is higher (CHF 5.2 billion) than the cost (CHF 4.7 billion).

Exploring evidence to support skills policy

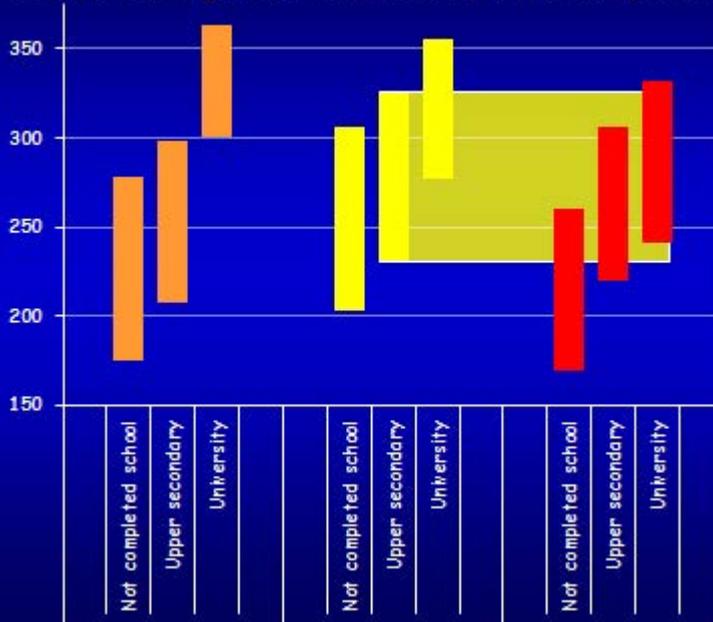
Information increases propensity to participate in adult learning

Participation in formal and/or non-formal education, according to whether the individual has looked for information



Measuring the value of qualifications

Interquartile range in skill distribution by educational qualification



20

• **PIAAC will**

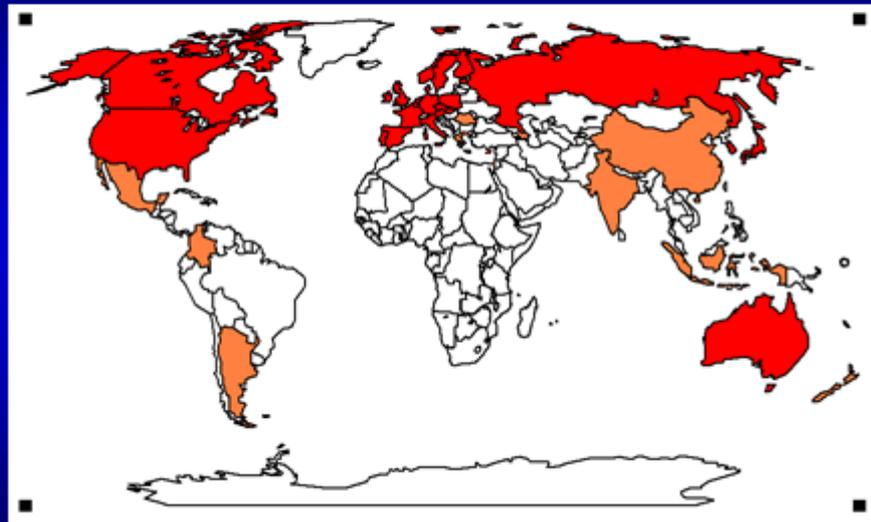
in each country interview 5000 adults aged 16-65 in their homes and testing their skills
collect information on the antecedents, outcomes and contexts of skill development and use

... **in order to...**

provide a comprehensive assessment of the human capital stock
show to what extent skills held by individuals are actually used at work and identify the role skills play in improving labour market prospects
improve understanding of the labour market and social returns to education and training
help governments better understand how education and training systems can nurture these skills
help countries prioritise investment of scarce resources in education
contribute to building strategic partnerships for policy implementation .

22

PIAAC participating countries Round 2



Education and Business Cooperation in Israel

Dr. Eli Eisenberg and Osnat Hachmon



Education and Business Cooperation in Israel

Vocational Training for Adults Seminar
September 23, 2011

Dr. Eli Eisenberg and Osnat Hachmon
ORT Israel

Introduction

- ▶ Invited report for the ETF as part of the Torino Process – September 2010.
- ▶ Providing a comprehensive overall picture of the cooperation between the education systems and the business sector in Israel:
 - Policies
 - Objectives
 - Benefits
 - Challenges



National policies

▶ Ministry of Education - The Administration for Science and Technology :

New policy of the Ministry of Education – leading the process for a meaningful , high-quality cooperation between the education system and the business sector.



National policies

► Ministry of Education - The Administration for Science and Technology :

Main objectives -

- * To promote professional advancement of technology teachers.
- * To update and adapt curricula in technological and vocational study tracks .
- * To adapt technological / vocational education to international standards.
- * Involving students working in industry.



National policies

► The Ministry of Industry, Trade & Labor - Senior Department of Vocational Training and Human Resource:

- Framework for youth (secondary) education:
Authority granted to TVET by the Education Law - 1953 and the Youth Labour Law -1953.
- Framework for adults (18+) training.



National policies

▶ The Ministry of Industry, Trade & Labor – The Office of the Chief Scientist

- Operates to increase the cooperation between industry and universities in order to encourage industrial R&D and to develop knowledge-intensive industries.



Primary education - business sector

- ▶ **Objectives:**
 - Exposure to industry and raising awareness among primary school children.
- ▶ **Best practices:** FLL, Cultivating entrepreneurship.
- ▶ **Challenges:**
 - Taasiyeda and
 - Funding for the activities.



Secondary education - business sector

▶ Objectives:

- Motivate students to choose technological-scientific and vocational tracks.
- Professional advancement and development of teachers and trainers.
- Relevant and updated curricula and equipment.



Secondary education - business sector

- ▶ **Best practices:** Tech-Mat program, Heznek Lata'asiya, in-service courses for technology teachers cooperation with hi-tech industries.
- ▶ **Challenges:**
 - Structured and systematic model of cooperation.
 - "Top down" policy and founding (transport).



Post secondary education - business sector

▶ Objectives:

- Professional development: technician, practical engineering and vocational training.
- Removing sectors from the cycle of poverty.
- Improving attitudes towards work.

▶ Best practices: On-the-job training, Telem, ATIDIM for Industry, A Woman of Worth.



Post secondary education - business sector

▶ Challenges:

- Difficulties in locating industries to cooperate with HR training organisations.
- Dwindling government support for VT for the stronger strata of society.
- Low correlation between the needs and demands of employers and supply in the labour market.



Tertiary education - business sector

► Objectives:

- Experience in industry.
- Advancing the level and relevance of teaching and learning.
- Promoting the institutions' R&D activities.



- ### ► Best practices:
- Applications companies, technological initiative incubators, the MAGNET program, Ofakim, student internships in commercial companies.



Tertiary education - business sector

► Challenges:

- Difference of priorities in education and industry.
- Disagreements on issues of intellectual property.
- Shortage of personnel willing to mentor student projects.
- Lack of awareness among managers in traditional industries of the importance of R&D processes in their work.



Conclusions

- ▶ Awareness of the need for cooperation between the education system and the business sector has grown.
- ▶ The aims, benefits and challenges depend on the different age groups of the students and on the personalities of the key figures either in education or in the business sector.
- ▶ There is no single inter-ministerial body that functions as a consortium to give direction to this necessary cooperation.
- ▶ There is no legislated, budgeted comprehensive policy nor any supervisory or evaluation framework.



Adult Vocational Training and the Israeli Labor Market

One of the most important mechanisms for expanding participation in the Israeli labor market and reducing unemployment and poverty in the long term is vocational training. Government-initiated models found in many OECD countries that involve the participation of the business sector, trade unions, the self-employed and employees themselves have proved to be highly efficient in the attainment of the aforementioned goals. With this in mind, we would like to propose a structured model for Israel.



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