TRAINING LEVIES

Evidence from Evaluations*

Background and Introduction

There is often broad political support in developing countries for public provision and financing of worker training and most countries have policies that, either directly or indirectly, support the training of workers. One strategy is to create the right environment for firms to train their workers, rather than legislating compulsory spending on training. Governments may promote training by, for example, improving access to relevant information, highlighting the skills acquired through training, and encouraging flexibility so that employers and employees can make use of the acquired skills.

An important element is the financing of training. An appropriate financing policy ensures both the stability of funding and the level of financing. The claim on public resources for vocational education and training is much weaker than that for lower levels of education in most countries. Furthermore, in many developing countries, government budgets constitute a vulnerable and unreliable source of financing for training. Thus an important element in the financing of worker training is to increase the contribution of beneficiaries – both employers and trainees – while ensuring that adequate incentives are in place to make training relevant to the needs of the labor market.

This note examines one of the most commonly used techniques for generating resources from employers – payroll levies. In many countries payroll taxes on enterprises (with reimbursement for training undertaken) have become a significant source of financing for skills training, both in specialized training institutions and in enterprises.

One of the key principles underlying these schemes is to try to address the ‘free rider’ problem: when training is transferable, the benefits from training can be reaped by other firms through the poaching of workers. Hence firms may decide to underinvest in training. Given that all firms contribute to financing training (at least theoretically), this free rider problem becomes less of an issue.

Another rationale for payroll levies is that as the firms are contributing financially, such interventions encourage them to put greater emphasis on upgrading the skills of their workforce and making them more competitive.

Payroll taxes are also attractive to governments because they provide a sheltered source of revenue for training and a means of mobilizing funds that may otherwise be unavailable to the public sector.

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Types of Payroll Levies

While there are mixed models, two major types of payroll taxes for financing training exist in developing countries. In the traditional (revenue generating) scheme, firms are taxed to generate revenues to finance training provided by the public sector. In the alternative, the levy-grant or levy-rebate, scheme, in-plant training is encouraged by providing firms with training incentives. These schemes are described below.

Revenue-Raising Schemes. In these schemes, revenues fund national training systems that provide a wide range of pre-employment and in-service training courses. Training programs in Brazil and Morocco are examples. The emphasis is on public-sector training provision rather than the encouragement of firms to undertake training. The coverage of this levy also varies, both in terms of sectors and firm size. This levy is restricted in many countries to the industrial sector of the economy, reflecting the limitations of the programs offered by public training establishments. In other countries, the levy also covers the commercial sector and, in some cases, is all-encompassing. Brazil, Chile and Morocco are examples of countries that have implemented such economy-wide schemes.

Levy-Disbursement Schemes. In other countries, the payroll tax is linked to a disbursement scheme, with firms receiving grants in proportion to the level of training that their employees undergo. The advantage is that payroll-tax proceeds are used to encourage firms either to set up programs of in-service training or to purchase training for their workers at a recognized training center. In this way, the firms qualify for a rebate of up to a specified percent of the tax paid. These schemes take various forms:

- **Training cost reimbursement/levy-grant schemes:** Firms are reimbursed based on the cost incurred for certain designated forms of training. Alternatively, grants are paid to firms conditional on meeting criteria once a systematic training approach is adopted. Examples of countries with these schemes include Hungary, Kenya, Malaysia, Singapore, and South Africa.

- **Payroll tax exemption:** Firms can reduce or eliminate their levy obligations by the amount of approved training provided or purchased. Côte d’Ivoire and France are examples of countries which implement these schemes.

Administration of these schemes differs by country and type of scheme. In revenue-raising schemes the money is usually collected and administered by the government body or agency directly responsible for training. In reimbursement schemes, governments and/or employers and workers organizations administer reimbursement mechanisms and levy-grant schemes from national or sectoral funds. These funds collect levies and distribute training grants based on defined criteria. Payroll-tax-exemption schemes usually operate through employers’ individual actions and are supervised by either the Ministry of Labor or the national general revenue agency.

Advantages and Drawbacks of Levy Schemes

Taxes for financing training fall upon the enterprise and it is believed that the same enterprises bear the burden of the levy, thus making it appear to be ’fair’. But on whom does the real burden fall – do employers bear the costs or are they passed onto workers in the form of lower wages?

If the firm-sponsored training program is exactly what every worker would have chosen for himself or herself, then the cost will be borne entirely by the worker (who would willingly accept a wage net of all payroll tax contributions). If – as is more likely – the scheme is not identical to what the worker would choose, the tax burden will, in general be shared by the worker and the employer. Thus, the higher the elasticity of demand for labor, the larger the share of the tax borne by the worker; and the higher the elasticity of supply of labor, the higher the share of the tax borne by the employer. Who actually pays (i.e., bears the incidence) therefore depends not on whom the tax is levied but the design of the scheme and the rel-
ative market power of the worker vis-à-vis the employer.

An important issue is how closely training benefits match the individual tax payments made. For example, charging a uniform tax across the board (which is the prevalent method in most countries), when costs and type of training vary significantly by sector, may lead to cross-subsidization of workers in some sectors at the expense of others. A related issue is whether training opportunities are distributed equitably across workers. If, for example, the tax finances the training of high-skilled workers, low-skilled workers would not benefit and would, in fact, subsidize the training of those with higher skills.

Possible Advantages and Disadvantages of Revenue-Raising Levy Schemes. These schemes are one of the most sheltered and reliable sources for financing public training, especially in countries that face considerable difficulties in mobilizing such resources. These schemes may assist in developing national training capacities and in financing the training needs of disadvantaged groups and small employers who may wish to avail of low-cost public training. However, such schemes are also fraught with problems. It is difficult to sustain employer interest and participation in these schemes – many employers regard their contributions simply as a tax. Often when the public system is of low quality, they feel that the levy they are paying is supporting an inefficient supply-led and hence, inappropriate, training system. These schemes are also sometimes used to expand into areas not relevant to employer demands. For example, the Colombian training authority (SENA) has expanded into areas such as agriculture, construction and training for the self-employed – services that are only loosely tied to the needs of firms that pay the levy.

Possible Advantages and Disadvantages of Levy-Disbursement Schemes. These schemes promote self-
financed, employer-based training. By establishing criteria for financing from levy-based funds, the schemes also allow management of the profile and quality of training offered by employers. These advantages are apparent in Singapore’s Skills Development Fund where the number of individuals trained tripled since inception and number of firms benefiting from the fund more than doubled since 1991, with a significant portion of training conducted on the job. A drawback with these schemes is that incentives may be inadequate to mobilize additional training, resulting in a deadweight loss – subsidizing programs that employers would have provided anyway. This leads to a windfall to firms with well-established training programs, while other firms, which should be increasing their training, may not do so.

Effectiveness of Levy Schemes: International Evidence

There are over 30 countries in the world where levy schemes exist or have existed in the recent past. Generally, tax rates range from 0.5-3.0 percent of payroll and stay reasonably stable over time (Table 1). Countries differ in the sectors covered by the tax – with agriculture and the public sector most often excluded. Smaller employers are also sometimes excluded from coverage.

Evaluative evidence on levy schemes is limited. In spite of the relative prevalence of these schemes, rigorous evaluations of the effectiveness of levy programs are uncommon. The evidence presented here draws on the evaluations of some of these schemes. They include revenue-generating levy schemes such as the Brazil SENAI scheme, payroll tax exemption schemes such as Cote d’Ivoire’s Vocational Training Development Fund, and levy-grant/ training cost reimbursement schemes such as Hungary’s Vocational Training Fund and Malaysia’s Human Resources Development Fund (HRDF).

Some general findings on the impact of these schemes emerge:

- **Levy schemes have led to an increase in quantity of training.** In many countries levy schemes have had some impact on increasing the amount of training. For example, in Malaysia, HRDF participants were more likely to have trained their employees as compared to non-participants. Similarly, in France under the levy-exemption scheme and in Singapore through the Skills Development Fund, the amount of training undertaken by employers increased. A common feature of schemes in which training has increased is the presence of an effective system for administering the levy – both for levy collection and for administration of grants. On the other hand, Korea saw a steep decline in the number of trainees once the training levy exemption was put in place in the mid 1970s. Very complicated rules governed training requirements for the levy and the criteria for approval, hence many employers did not find it worthwhile to apply for it.

- **These schemes are more effective under conditions of economic growth.** This is not surprising - training has greater impact under conditions of economic growth. For example, in Singapore, the success of the Skills Development Fund is related to the fact that the economy and, correspondingly, the demand for training have been growing. The government has made a conscious decision to link skills development policies with the economic development strategy. Thus, skill improvement is a continuous and expanding process that is based on economic development needs. However in countries such as Tanzania and Nigeria where growth has been slow, the levy-grant scheme has not significantly increased training because employer demand has remained depressed.

- **Small employers do not benefit substantially from these schemes.** This issue is of great concern to developing countries where over 80% of employment is in small to mid-sized firms. Small and mid-sized employers are either non-compliant in paying the levy or, even if they pay the levy, do not claim reimbursements for training their workers. The high rates of non-compliance are
related to the low administrative capacity of governments and ineffective levy-collection mechanisms that are not able to target smaller employers (e.g. Cote d’Ivoire, Tanzania). Bureaucratic and administrative difficulties impose high opportunity costs, especially on smaller firms, and dissuade them from submitting claims (e.g. in Nigeria).

- **There is cross-subsidization across skill categories.**
  In a similar vein to the point above, evidence shows that these schemes do not affect the distribution of training across different skill categories – most of the training goes to the more educated and higher-skilled workers. Hence, less skilled workers are subsidizing the training of the more skilled (e.g. in Malaysia).

**Development of Levy Schemes: Some Guiding Principles**

Based on the evidence, there are some general principles that should be kept in mind for countries that are planning to implement some sort of levy schemes for training. These principles are similar to those suggested in the Bank’s policy paper on VET (Box 1).

- **Employers buy-in for these schemes is crucial.** Employers are also not always well disposed to the levy. For example, the U.K. levy-grant scheme was viewed by employers as an additional tax that added to industry’s costs and reduced overall competitiveness. In Hungary, employers felt that the government exerted too much control over funds and limited their effectiveness (see Box 2). For such a scheme to be successful, governments should ensure that employers are consulted early and are involved in the design, implementation and evaluation. It is important to ensure that training that is being demanded by employers is financed through these schemes.

- **Administrative efficiency and transparency is crucial.** This is a prerequisite for any successful training levy scheme. Characteristics of such a scheme include an effective tax system/levy-collection mechanism, efficiency in processing and reimbursing claims and clear and transparent application procedures that promote employer compliance. The Singapore Skills Development Fund, the French levy-exemption scheme and the Malaysian levy-reimbursement scheme are examples of well administered and transparent

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**Box 1: General Principles to Guide The Operation of Payroll-Levy Schemes**

Several points of principle should guide the operation of payroll levy schemes. These include:

- Levies should be subject to periodic review
- Levies should vary across sector/industry to reflect differing skill composition of the labor force and training needs
- The system should be designed and administered in such a manner that encourages employers – small as well as large – to participate
- Training authorities should not venture into extraneous activities
- The range of training services and courses provided should reflect employer needs
- Levies should be used to promote training by enterprises.

**Box 2: Lack of Employer Involvement in Hungary’s Training Fund**

Three hundred and forty top managers in Hungary were asked to assess the degree of influence of various actors on the allocation of the training fund on a scale of 0 to 100. They judged that government and ministries have the strongest influence (score of 87), followed, in descending order, by local governments (41), schools and training institutions (37), employers’ associations (32), and trade unions (21). In their opinion, the order of precedence should be reversed, with employers followed by schools exerting the strongest influence on how funds are allocated and government playing a less dominant role. As an example of excessive government influence, employers cited the government’s decision to use the training fund to finance public training institutions that they believe should have been financed from the government budget.
schemes. However, even these schemes encounter high rates of non-compliance – over one-third of employers in Malaysia do not comply with HRDF regulations because they find them quite burdensome (Box 3).

- **Levy schemes should finance in-service and not pre-employment training.** Firms are more likely to share in the cost of firm-specific training but less likely to share in the cost of general training. To the extent pre-employment training is general in nature, the burden of paying for that training should not fall upon firms. However, some countries have used a portion of the resources levied from firms to fund training authorities and public training centers that provide pre-employment training for unemployed youth and other marginalized groups. While this may be a socially justifiable objective in itself, it may not be economically optimal.

  - **Fund design should ensure that non-governmental providers are not crowded out.** In some countries, especially where the levy collected is being channeled back to fund public training institutions, there has been crowding out of non-governmental training providers (e.g. Kenya and Tanzania). It is essential that the fund should be designed in such a manner that it allows both government and non-government providers to compete on a level playing field. Not only will this ensure that non-government providers are not crowded out, but through ensuring greater competition, it will also increase the effectiveness and efficiency of

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**Box 3: The Malaysian Human Resources Development Fund (HRDF)**

The HRDF, a levy reimbursement scheme, was established in 1992. The Human Resource Development Council, with representatives from the private sector and from responsible government agencies administer the scheme. Employers pay a payroll contribution of one percent and are eligible to claim a portion of allowable training expenditures up to the limit of their total levy for any given year. The reimbursement rates vary by sector and type of training. The HRDF is considered to be one of the most well-run schemes administratively and is extremely efficient in reimbursing claims and making procedures with which employers can easily comply.

**Evaluation of HRDF**

A survey conducted in 1994 of 1450 firms eligible to participate in the HRDF found that 402 firms (28 percent) were not registered with the HRDF. Of those registered, another 35 percent reported that they did not claim reimbursements under HRDF. Small firms (with 50 to 100 workers) are more likely to be non-compliant (49 percent) than large firms (8 percent). These data also revealed wide variations across sub-sectors in the take-up of the HRDF scheme. The highest take-up rates of the scheme were in general machinery, electric machinery, and ceramics and glass. Sub-sectors with low take-up rates were food, beverages and tobacco, and textiles and apparel.

Comparing the experiences of firms registered with the HRDF with those which chose not to register provides some answers about the effectiveness of HRDF. The results show that HRDF increased training modestly - 49 percent of the registered companies said that they had increased training and 39 percent firms said that their training had remained the same. In contrast, of the eligible firms not registered with the HRDF, 27 percent said that their training had increased while 47 percent firms said that their training had remained unchanged. Regression analysis showed that while HRDF did not have any impact on increasing training among small firms, it did have a role in increasing training among medium and large firms.

Who are these non-claimant firms and why are they not training? Only 6% of these non-claimants do no training. The majority of firms not claiming (54 percent) are those that only provide informal on-the-job training. The remaining 40 percent report that they provide formal training, yet do not claim reimbursements for expenditures. Analysis showed that firms least likely to claim from HRDF are small firms and firms providing only informal training. Important factors that employers cite as inhibiting their training: the limited resources available for training, the use of mature technology with low skill requirements, the adequacy of skills provided by schools, and the availability of skilled workers who can be hired from other firms.
public provision of training. The government has an important role in ensuring quality control among training providers, both government as well as non-government. Governments need to ensure that providers of good quality and relevant training are the ones that are allowed to access the fund.

• Governments should play a significant role in evaluating the effectiveness of these schemes. As has been pointed out, these schemes have rarely been evaluated in a rigorous manner. While over 30 countries have implemented these schemes, only a handful of schemes have been evaluated rigorously. Governments have largely neglected their roles as providers of information about the impact and effectiveness of these schemes. Effectiveness of these schemes will be enhanced when they are combined with rigorous evaluations to ensure that the training is actually implemented as intended, the quality of training is high, and employers are benefiting from the scheme. Without rigorous and systematic monitoring and evaluation, there is significant opportunity for misuse in these schemes. While the cost of monitoring and evaluation is likely to be high, an expansion of this role may be one of the most effective ways for governments to foster the development of relevant and cost-effective training systems.

Furthermore, evidence suggests that the levies can be subsidies to large employers while a tax on smaller employers. Given that most of the employment is concentrated in small and medium-sized enterprises in the low-income developing countries, governments should not dampen their growth by imposing a further tax on them.

**Conclusions**

This note discussed the rationale behind levy schemes and looked at some of the evidence on the evaluation of these schemes. It is quite clear that implementing an efficient and equitable levy scheme may be more suitable for middle-income countries rather than most low-income developing countries. While these schemes have usually led to an increase in the quantity of training undertaken, some of the prerequisites for such a system are not yet fully in place in most of these countries. Their economies are growing relatively slowly. Effective administrative mechanisms may not be in place to collect and disburse the levy in most of these countries.

**Annotated Bibliography**


Dar, A., S. Canagarajah and P. Murphy (2001). *Training Levies: Rationale and Evidence from Evaluations*. Discussion Paper. This note is based on this paper.


