

question as to how a comprehensive system of lifelong education could or should be financed. In this entry, alternative mechanisms for financing lifelong education are discussed.

### *1. Criteria for Evaluating Financing Schemes*

The number and type of goals for lifelong education have been widened beyond the commonly used performance indicators: personal development, economic efficiency, and social equity (Schütze 1982 pp. 56–59, Timmermann 1983 pp. 99–105, CERI 1986 pp. 132–45). Encouraging lifelong education in a recurrent way aims at replacing traditional schooling with a flexible and recurrent alternation of education, work, leisure, vacation, and sabbaticals. Increasing efficiency internally and externally refers to improving the allocation of resources within and between educational organizations, and to a better matching of education and work (see *Recurrent and Alternation Education*). Encouraging innovations in education comprises the improvement of general knowledge as well as of marketable and nonmarketable, but societally valuable innovations. As the systemic approach of lifelong education requires the integration of segregated segments of general education and vocational training, encouraging integration is the fourth criterion for evaluating financing schemes. Considering the widespread belief that in most countries bureaucratic and hierarchic decision structures still characterize educational organizations, lifelong education is aimed at encouraging individual choice and personal development. Under the given arrangements of education and training, participation in postcompulsory activities differs considerably between societal groups as to sex, age, social background, ethnical background, level of initial schooling, and training. Therefore, overcoming these participation patterns, promoting equality of educational opportunity, and encouraging demand for lifelong education are further goals. As inequality of educational opportunity is seen to help to (re)produce social and economic inequity, decreasing the degree of social and economic inequity is a complementary goal. Increasing the democratic potential of education, work, and the society as a whole, and preserving and enforcing social cohesion (so that societies can survive as cultural entities) are goals to which lifelong education should also strive. What kind of financing modes could enable lifelong education to develop in accordance with these goals, and what effects may be expected to emanate from each alternative to the goals? As there is also concern with regard to the impact of lifelong education on the total costs of education as well as on the public budget, these effects will also be considered.

### **Lifelong Education: Financing Mechanisms**

Education and training activities for youth and adults result from various decisions in the course of time. Seldom do these decisions reflect comprehensive concepts of education evolution. An international comparison (ABV Management Service 1979) demonstrated the diversity of education structures and financing schemes between and within countries. The idea of lifelong and recurrent education is an intellectual attempt to carry the diverse education arrangements and financing schemes into a comprehensive system. The financing issue raises the

## *2. Alternative Financing Mechanisms*

Six basic financing models have been discussed in the context of lifelong education (Timmermann 1983).

### *2.1 The Self-financing Model*

The self-financing model assumes that individuals pay for lifelong education out of savings, current income, or future earnings. The assumption states that under the basis of the "pay-as-you-use" principle, the participants in lifelong education schemes have to bear the costs. Suppliers could be public institutions or private firms; in either case prices could be market prices. In the case of state supply, prices might be reduced to the cost-covering level.

The model does not reveal an optimistic impact perspective. For rate-of-return reasons, postponement of education activities by individuals from when they are young into their adult life is not beneficial (Stoikov 1975). Hence a recurrent mode of lifelong education would not develop. While internal efficiency of education production and the speed of innovations are likely to increase under this model (although nonmarketable educational products and innovations might be neglected), external efficiency would probably suffer from cobweb cycles in the education and qualification markets. The integration of general and vocational education might be pushed, although the latter would tend to dominate the former. While individual choice and buyer sovereignty would widen, "education-distant" groups would be discouraged, and the (inequal) distribution of income would reflect the (unequal) distribution of demand for lifelong education. The equity issue would moreover remain at stake; democratization of the decision structure within education would not be expected.

### *2.2 The Drawing Rights Model*

The drawing rights model stresses "the right to utilize one's assets in a broadened social insurance system for income maintenance during nonwork periods with a greater degree of self-determination" (Rehn 1983 p. 67), and recommends a single comprehensive system for financing all periods of nonwork by extending the social insurance system to a comprehensive personal account system which would integrate the given diverse income transfer schemes into a single one. Financial means would come from account holders and employers who would have to contribute to the account on the basis of their income or through a certain payroll levy. The self-employed would be included in the system, and the state would have to finance the contributions for those unable to cover their education expense.

The model asks for a general and compulsory membership for all citizens, who would gain the right to draw on their account up to the limits of their

actual or expected assets of credits. The account holders would be allowed to overdraw in early periods but would have to balance the account over the course of a longer life-phase. Beyond a certain level of credits devoted to one's retirement pension, the individual should be free to decide how to use the drawing rights.

The model primarily aims at making the sequences of work and nonwork periods in the life of individuals more flexible. It also intends, although to a limited extent, to strengthen the free choice of individuals with regard to the allocation of time for various activities during their lives. While the model provides for income for individuals during nonwork periods, it does not solve problems associated with education supply. The self-financing and the drawing rights model differ as follows: while accumulating funds for lifelong education is voluntary in the former, individuals are obliged to save for nonwork periods in the latter. While individuals are free to use their savings for any purpose in the self-financing model, only a proportion of accumulated funds are given free for any use under the drawing rights scheme due to the necessity for withholding funds for retirement pensions or similar purposes. Also under the drawing rights scheme, the "automatic" emergence of a comprehensive recurrent system of lifelong education cannot be expected without any collective agreements or legislative actions. Moreover, as education would compete with other nonwork activities for the funds, underinvestment in lifelong education would be likely. Finally, as the drawing rights model would start at the given unequal distribution of income, the opportunities to save for and participate in lifelong education would quite directly reflect this income inequity and foster the spiral between income, investment in education, and returns.

### *2.3 Individual Entitlements*

Financing lifelong education through individual entitlements (Levin 1977, 1983) starts from the observation that in most countries large parts of education and training are being financed by the state, the financing streams going directly from the state to the education institutions. This system is said to reproduce internal as well as external inefficiency, and also inequity of education and social rewards. The entitlement approach suggests directly supporting individuals through entitlements. Institutions would gain their returns from fees.

An entitlement would provide a guaranteed sum of money for each individual after compulsory schooling, and this could be used for attending education programs that satisfied the criteria established by the government. According to different concepts, entitlements could take the form of loans or grants, and their size as well as composition could depend on family income or the background characteristics of recipients or on the type of education chosen.

Individuals would be eligible for using the entitlement over a long time span, both prior to the start of their working lives and during their working career. As the entitlement account would accumulate interest in times of nonuse, the individual would be encouraged to choose carefully between the diverse opportunities of lifelong education both at one point in time as well as over time. In order to become effective, such an entitlement scheme would require a comprehensive regulatory and information system (see Levin 1977).

The individual entitlement model also stresses the issue of individual choice in lifelong education. The main effect, however, might be the impact on improving equality. This impact would depend on the size of the entitlements, the composition of grants and loans, their stimulus with regard to demand particularly from disadvantaged groups, and the tax incidence. Under this scheme, total costs of lifelong education and the educational burden on the public budget would increase.

#### *2.4 Single-employer Financing*

Financing lifelong education by single employers would be an extension of on-the-job training, apprenticeship, and in-plant further training systems. This model would require all employers to pay for lifelong education activities demanded by their employees and which they would be willing to support. With regard to the interests of employers (who would try to shift the burden onto the buyers), the scheme would run the danger of reducing lifelong education to firm-specific postcompulsory training so that employers were sure to internalize the returns. However, restriction of employee mobility might conflict with macroeconomic needs for mobility. Hence, single-employer financing might restrict the external efficiency of lifelong education, even though internal efficiency for single employers may be high. Inflexibility of those trained, cobweb cycles in the markets for lifelong education activities, overinvestment in lifelong education in one set of branches and underinvestment in others, a general tendency toward underinvestment, and competition biases are likely to produce misallocations between education and employment. The single-employer financing model would suffer from further shortcomings: the unemployed would be excluded from lifelong education, training-specific innovations would be likely to dominate general education, and individual choices would be influenced substantially by employers. Finally, one would not expect equality of educational opportunity nor social equity to improve.

#### *2.5 Parafiscal Funds*

Competitional biases and underinvestment in education might be avoided by financing lifelong education through parafiscal funds (Clement 1983). These are autonomous (centralized or decentralized)

corporations intermediate between state bodies and private organizations, and constituted by deliberate or compulsory membership of employers. The main feature is their autonomy in raising and distributing funds for the purpose of lifelong education, and determining and monitoring the standards which guide the levy and distribution of the money. Some countries have applied the idea of collective parafiscal financing to initial vocational training and to retraining. Examples are the Industrial Training Boards in the United Kingdom, the Federal Employment Office in Germany, and collective training corporations in Latin American countries (SENAI [Brazil], SENA [Columbia], INTECAP [Guatemala]). The levy would be taken from (private and public) enterprises in relation to the wage-sum, profits, or value-added. A levy on value-added seems the most tenable, because wage and profit levies could discriminate against labor- or profit-intensive firms. The fund would be guided by the idea of democratic participation in that it would be governed by boards being constituted of representatives of diverse government bodies as well as of employers, trade unions, independent experts, and educators. The boards would decide upon the levy formula and the quality standards of the education activities, and would monitor these standards. Opposed to entitlements and drawing rights, "the extent of an individual's rights to education and training and the degree of individual choice is not predetermined" (CERI 1986 p. 130).

Commonly, the model restricts itself to institutional funding. It might be worthwhile to examine the potential of an entitlement solution implanted into it. While parafiscal funds are likely to create favorable characteristics with respect to recurrence, integration, innovation, and internal efficiency, the impact on external efficiency seems ambivalent (Timmermann 1983 p. 117), and the unemployed would again be excluded from lifelong education. Moreover, the ability of parafiscal funds to encourage demand for and to diminish the inequality of participation in lifelong education and social equity is questionable.

#### *2.6 The State Financing Model*

The state financing model would require the state to raise and spend the financial means (like the entitlement approach) for lifelong education, as well as to provide it through public programs (unlike the entitlement scheme). This approach extends the education monopoly of the state to lifelong education (see Timmermann 1982). As lifelong education is under political responsibility, encouragement of recurrence, integration, participation, realization of high and equal quality standards, equality of opportunity, and social cohesion all seem feasible. However, the ability to improve efficiency (internally and externally) may be questioned, and a uniformity

of programs, instead of variety, might restrict individual choice. Moreover, particular state interests could dominate the democratic participation of learners. Finally, the assumption of the rationality of state agencies may be fundamentally questioned. Arguments of public choice theory (Gwartney 1977 pp. 60–67, 376–91) lead one to assume “state failure” as a consequence of the rational voter ignorance effect, the special interest and shortsightedness effect, the lack of stimuli to act efficiently, of political lags in decision processes, and of informational and financial as well as legitimation restrictions.

### 3. Conclusion

The discussion of alternative financing mechanisms for lifelong education suggests that much theoretical and empirical work has to be done. Empirical evidence on financing lifelong education is meager, and theoretical reasoning is close to intelligent speculation on the basis of background theories. There is no “best” financing solution. While this conclusion seems valid, nevertheless, deeper scrutiny of each model seems necessary with respect to their regulation, information, decision, stimuli, production, and supply mechanisms. While much controversy between advocates of the models is due to the “who pays” versus “who should pay” issue, these disputes might lose power if they were concentrated more on the issue of “who bears the burden” versus “who should bear the burden” of financing lifelong education. Here again, much empirical work has to be done to approach the answer reliably. Moreover, while—from theoretical reasoning—it seems clear that participants, employers, the state, and society benefit from lifelong education, there is hardly any knowledge about the size and the distribution of these benefits. Nevertheless, the attempt to develop a (recurrent) system of lifelong education could rest on a comprehensive financing scheme which would take contributions from all beneficiaries according to their ability to pay.

*See also:* Costs of Continuing Education: Industrialized Countries; Nonformal Education, Economics of; Continuing Education, Effects of; Paid Educational Leave and Collective Bargaining; Recurrent and Alternation Education

### References

- ABV Management Service 1979 *Bildungswesen im Vergleich. Berufliche und nichtberufliche Weiterbildung in ausgewählten Ländern*, 2 vols. Bundesminister für Bildung und Wissenschaft, Bonn
- CERI (Center for Educational Research and Innovation) 1986 *Recurrent Education Revisited*. Almqvist and Wiksell, Stockholm
- Clement W 1983 Intermediate (“parafiscal”) financing schemes. In: Levin H M, Schütze H G (eds.) 1983
- Gwartney J D 1977 *Macroeconomics. Private and Public Choice*. Academic Press, New York
- Levin H M 1977 Post-secondary entitlements: An exploration. In: Kurland D (ed.) 1977 *Entitlement Studies*, NIE Papers in Education and Work 4. US Department of Health, Education, and Welfare, Washington, DC
- Levin H M 1983 Individual entitlements. In: Levin H M, Schütze H G (eds.) 1983
- Rehn G 1983 Individual drawing rights. In: Levin H M, Schütze H G (eds.) 1983
- Schütze H G 1982 Das OECD-Konzept “Recurrent Education” und Kriterien für die Finanzierung lebenslangen Lernens. In: Kuhlentkamp D, Schütze H G (eds.) 1982 *Kosten und Finanzierung der beruflichen und nichtberuflichen Weiterbildung*. Diesterweg Verlag, Frankfurt
- Stoikov V 1975 *The Economics of Recurrent Education and Training*, International Labour Office, Geneva
- Timmermann D 1982 Das Staatsfinanzierungsmodell als Finanzierungsalternative für “Recurrent Education.” In: Kuhlentkamp D, Schütze H G (eds.) 1982 *Kosten und Finanzierung der beruflichen und nichtberuflichen Weiterbildung*. Diesterweg Verlag, Frankfurt
- Timmermann D 1983 *Financing Mechanisms: Their Impact on Postcompulsory Education*. In: Levin H M, Schütze H G (eds.) 1983

### Further Reading

- CERI (Center for Educational Research and Innovation) 1987 *Adults in Higher Education*. OECD, Paris
- Levin H M, Schütze H G (eds.) 1983 *Financing Recurrent Education*. Sage, Beverly Hills, California
- Mincer J 1991 Job training: Costs, returns, and wage profiles. In: Stern D, Ritzel J J M (eds.) 1991 *Market Failure in Training? New Economic Analyses and Evidence on Training of Adult Employees*. Springer-Verlag, Berlin
- Mushkin S J (ed.) 1974 *Recurrent Education*. National Institute of Education, US Department of Health, Education, and Welfare, Washington, DC
- Tuijnman A 1989 *Recurrent Education, Earnings and Well-being. A Fifty-year Longitudinal Study of a Cohort of Swedish Men*. Almqvist and Wiksell International, Stockholm

D. Timmermann