

Children's Economic Socialization  
Austrian Children in the Age Between 8 and 14 Years

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Abstract

The understanding of and reasoning about various economic concepts was assessed by interviewing 90 Austrian children of both sexes between 8 and 14 years. The results are in line with those reported in previous studies, suggesting that there are negligible sex differences, while age is of crucial importance. The picture that this conveys is one of gradual progress in economic knowledge and economic reasoning of children.

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## 1. Introduction

Interest in "naive economics" has substantially increased during the last decade. Teachers of economics are interested in the developmental stages children go through in the acquisition of economic concepts and in the usefulness of training programs. Also, children are recognized as becoming increasingly important economic agents. Children are assigned more influence in family decisions today than in the past and their pocket money represents a considerable proportion of economic expenditures.

In 1983, Leiser presented an investigation on children's understanding and reasoning about economic affairs. The findings stimulated researchers of various countries to repeat the study in their countries in order to finally produce a cross-cultural comparison of children's developmental steps. This study focuses on Austrian children's understanding of economic concepts and their economic reasoning.

Previous studies demonstrate the existence of a developmental sequence in the understanding of economic phenomena. Berti and Bombi (1981) report an increasing understanding from the age of 3 to 8 years. At around 11 and more, a crucial step towards a clear and complete image of principal economic relationships occurs (e. g., Leiser, 1983; Lassarre and Roland-Levy, 1988). Initially, children may view economic transactions from the perspective of individual participants. Beginning at 11 years children become aware of inconsistencies. Attempts to eliminate them may often successfully lead to more integrated concepts.

To allow for cross cultural comparisons of this and other studies about children's economic socialization, some characteristics of Austria's economy shall be illustrated. Austria, today a politically neutral state, has a free market system and can be described as a modern, industrialized country. At the present, socialists and conservatives form the government. Austria has about 7.5 million inhabitants, with the majority being Roman Catholics (approximately 85 %). Sixty % of working people are male, 40 % are female; about half of the working people are white collar and 50 % are blue collar workers. The average monthly net income amounts to approximately US\$ 1,000. The maximum income tax amounts to 50 %. Social security is in Austria well developed. Present economic indices are good as compared to other western countries: the inflation rate was 1.7 %, 2.0 % and 2.7 %, respectively, in the years 1987, 1988 and 1989, and will slightly increase to 3.3 % in 1990. The GDP increased 1.5 %, 4.2 %, and 4.0 % in the last three years and will increase 3.0 % in 1990. The unemployment rate is better than in most other European countries. In the last three years it amounted to 5.6 %, 5.3 %, and 4.9 %; for 1990 an unemployment rate of 4.7 % is predicted. Concerning specific characteristics of the socio-political scene, it should be emphasized that ecological issues

are often discussed at the present; problems with Gastarbeiter are little; and as what concerns strikes, Austrias "Sozialpartnerschaft", a mutual agreement between workers and employers, made it possible that in the past almost no strikes happened.

## 2. Method

### 2.1. Subjects

In all, 90 pupils took part: one third were 8 years old, one third were 11, and the remaining third were 14 years old. There were equal numbers of each sex in each age group. Approximately two thirds of the fathers were white collar workers, the others were blue collar workers. Approximately half of the mothers were housewives, the others had a paid job. From a specification of the father's job, some attempt was made to classify their socio-economic class. The majority of them belonged to middle class. All pupils were attending a state primary or secondary school in Upper Austria; three quarters of the subjects attended a school in the country, the others frequented a school located in Linz.

### 2.2. Instruments and procedure

Subjects were interviewed using a free response questionnaire presented by Roland-Levy in this Journal. A few questions concerning the pupil's pocket money, their influence in family decisions, and games were additionally included. The children were approached at their schools and invited to volunteer if they were aged between 7 years 10 months and 8 years 2 months, 10 years 10 months and 10 years 2 months or 13 years 10 months and 14 years 2 months. The questions were asked in a personal interview, following a fixed order. At certain points the children were encouraged to develop their answers and to try to think of alternative ones. On average, the interview took about 20-30 minutes.

## 3. Results

The interview started with some questions concerning the children's' pocket money, gambling behaviour, and shopping with parents. Almost all children (86 %) confirmed receiving some pocket money, at least sometimes. Most of the 14 year old boys and girls said they received a specific amount of money once a months (60 %) or weekly (23 %); younger children received their pocket money weekly (53 % of the 8 year olds and 40 % of the 11 year olds). While younger children tended to save their money (43 % and 40 % of the 8 and 11 year olds but only 10 % of the 14 year olds), older children, especially boys, save a part and spent the other part (the respective percentages of children mentioning saving a part of their money and spending the other are 33 %, 40 %, and 73

% for the 8, 11, and 14 year old males; and 13 %, 33%, and 27 % for the female groups). Almost all (98 %) had a saving account. The amount of pocket money increased with age and is independent of children's sex.

Concerning gambling, 76 % of the children admitted that they sometimes played with others for money. Again, the probability a child gambling depended on age but not on sex (40 % of the 8 year olds gamble, while 93 % of the others gamble).

Three quarters of the respondents went at least sometimes shopping with their parents and thought they have a chance to influence their parents' purchase decisions. Twenty-four percent of the children indicated they had no say.

### 3.1. Economic Understanding

#### 3.1.1 Prices

The section about prices started with a question about the frequency of children who go shopping alone. Whereas in the French study (Roland-Levy, 1988) only 20 % of the 8 year olds indicated that they went shopping alone, 43 % of the young children interviewed here indicated that they went shopping alone at least sometimes.

When asked how prices are determined in stores, 20 % of the 8 year olds boys and 60 % of the girls were unable to give any indication. Most of the others mentioned that the shop keeper decides prices, thought the producer would decide, or insisted on saying that there is just one right price. The 11 year olds were convinced that the shop keeper (33 %), the producer (37 %), or the government (10 %) fixed the prices for a product. None of the 14 year olds admitted be unable to indicate how prices are determined. Again, the children indicated the producer (24 %), the shop keeper (27 %), and the government (10 %). Some mentioned taxes and talked about mutual agreements between different parties (11 %).

Eighteen percent of the respondents attributed to the shop keeper the power of deciding prices individually. For 23 % of the 8 year olds and 30 % of the 11 year olds, but for none of the 14 year olds the shop keeper can ask as much as he or she wants. When asked why the shop keeper does not ask more money, the children either were unable to respond or said that people would refuse to buy a product.

Sixty-seven percent of the 8 year old boys and girls said that the money the shop keeper asks for will be used privately or for the business. Only 20 % mentioned both use for private expenses and for expenses of the store. The majority of the older children mentioned both functioning of the shop and private expenses (53 %). However, there were still 20 % indicating only the private expenses and one third mentioning that the money was needed for the store.

Differences in economic understanding relative to children's age were not repeated for the last question concerning prices. Eight (= 27 %) and ten (= 33 %), respectively, of the youngest and oldest children indicated that prices for some products had increased in the past, while prices for others had decreased. Only 3 (= 10 %) of the 11 year olds mentioned prices fluctuating relative to the product. The majority of children (66 %) were aware that prices in Austria are, in the long term, increasing. Ten percent of the respondents perceived a deflation. When asked for the reasons for price increases, 61 %, 40 %, and 24 %, respectively, of the 8, 11, and 14 year olds were unable to respond. While the older group either indicated that prices increase because they always increased (29 %) or because income is increasing (24 %), the younger ones indicated that the quality of the products would improve. Half of the children who perceived a price decrease were unable to indicate any reasons. Two children thought it was due to discussions in Austria about joining the European Community; others said it is because shop keepers are already rich enough.

### 3.1.2. Salaries

While all 14 year olds correctly defined what salaries are, only 83 % of the 11 year olds and 40 % of the 8 year olds were able to explain the concept. Many of the youngest children thought of salaries as a special form of praise for the work one does. Interestingly, all children saw salaries from the employer's view. In the French sample, Roland-Levy (1988) found one quarter of the children to be "employer oriented".

In order to be able to proceed with the interview, all children who did not correctly define salaries, were given a definition and asked who paid them. The older the respondents the more often said the employer would pay (77 %, 67 %, and 87 %, respectively). The government was mentioned in 13 % of the cases; 13 % of the youngest girls said the bank would pay salaries.

Almost all children (98 %) said that income varies across employees. Interestingly, the youngest children (54 %), especially girls (71 %), attributed the amount of money one gets internally, saying that it depended on the person himself or herself whether he or she has a high or low income. With increasing age, external attributions augmented: 29 %, 55 %, and 55 % of the three respective age groups said the salary depended on the job one has and on the time one works with a specific firm. Four children had no idea about how salaries are determined. As for who decides, more 8 year olds than 11 and 14 year olds mentioned the employer (73 %, 57 %, and 50 %). In the older groups, the government was often perceived as responsible (3 %, 17 %, and 27 %) or other parties were mentioned, such as e. g., trade unions (0 %, 7 %, and 23 %). While

7 of the 8 year olds and 6 of the 11 year olds did not give an answer to the question about who pays salaries, all 14 year olds responded.

When asked what people can do to earn more money, 3 boys and 3 girls had no answer. The youngest pupils thought one should work more (51 %, 35 %, and 20 %), or search for a new job (11 %, 19 %, and 14 %). Girls (28 %) were more inclined than boys (30 %) to believe that working harder would result in higher salaries, whereas boys were favoured a new job (19 %; and 11 % of the girls). With increasing age, the answers became more sophisticated. In the oldest group, 16 % mentioned strikes, believed in discussions with the boss, and 2 % suggested illicit work. In contrast, one 8 year old girl said she would go to the minister of finances claiming for more money.

### 3.1.3. Saving and Investment

Children were asked to indicate what a person could do when he or she had plenty of money. While the 8 year old boys would save (40 %) rather than spend (36 %) the surplus, girls of this age group were more inclined to spend it (52 % as compared to 26 % who mentioned saving). This sex difference was also observable, though to a lower extent, in the older age groups. In the groups of the 11 year old boys, 19 % mentioned saving and 30 % spending the money; the respective percentages in the 14 year old male group are 30 % and 13 %. In the female groups the percentages amount to 19 %, 41%, and to 21 %, and 17 %. With increasing age, children more frequently suggested donating the surplus to charity. The respective percentages for the three age groups are 21 %, 39 %, and 48 %.

When asked to indicate the possibilities of becoming richer, 19 % of the youngest had no ideas or were resigned, saying there is no way. The other 8 year olds mentioned working harder (52 %) or consuming less (23 %). The idea of cutting down one's expenditures was most prominent in the group of the 14 (61 %) and 11 year olds (42 %), while augmenting the working time was given almost no chance (9 % and 25 %). Twenty-seven percent of the 14 year olds, and 11 % and 6 %, respectively, of the younger groups had ideas such as illicit work, gambling or taking advantage of the others' misfortune.

Most of the children (41 %) -- especially males (52 %, and 30 % of the females), and among these the 8 year olds (67 %) -- believed that possessing money is the most important in one's life. According to the children people strive for more money because they want to buy whatever they desire (21 %), or because possessing money equals social status and power. Some girls (22 %) and boys (6 %) thought money is a means for protecting oneself from unexpected events, or striving for more money is just an expression of a profound boredom rich people suffer from.

When asked whether it is possible to open a factory, 17 % of the youngest, 7 % of the 11 year olds, and 3 % of the 14 year olds said it was not, explaining that there are already enough factories and for ecological reasons it was impossible to open new ones. Eleven percent of the respondents said there it would be possible to open one but that there would be serious difficulties, and 80 % thought it is possible to open a factory. Slightly more boys (84 %) than girls (76 %) favoured the idea of opening a factory. Of course one would need lots of money (54 %), much experience (18 %) and high social status (9 %) to open a factory. The children knew that advantages of a factory are profits (44 %), and an increase in one's social status (11 %). Eleven percent of the pupils said one would open a factory just for the motive to produce something. One third of the youngest children believed in altruistic motives such as creating new jobs for unemployed people. Only 15 % and 11 % of the older pupils believed in the motive to create new jobs. Two percent of the children did not give any answer and 14 % had rather amusing ideas such as, for example, a man opens a factory if he wants to get a wife.

#### 3.1.4. Money

The next set of questions focussed on who has the power to make money. The answers were rather heterogeneous; 7 % admitted not knowing; 52 %, especially the 14 year old boys (83 %), mentioned banks, 6 % indicated the government, the others attributed the right to make money to the rich, to factories, and to God.

In Austria people generally pay in cash or by cheque. Credit cards are still not used much. When the children were asked about various possibilities to pay in stores, 28 % of the youngest did not know (3 % of the 11 year olds and 0 % of the oldest children). The others either indicated cash (37 %) or cheque (28 %). Only 7% (0 %, 4 %, and 13 % in the respective age groups) knew about "plastic money". Nine percent of the pupils mentioned exchanging something as a form of payment.

### 3.2. Economic Reasoning

Some questions were designed to tap children's ability to reason about economically important events, such as a decrease of shoe prices, the discovery of gold mines, the abolition of taxes, and distribution of money among the people.

#### 3.2.1 Shoe Prices

If shoe prices would all of a sudden go down, according to the children their mothers would be happy (21 %) and buy more shoes than in the past (58 %); the shoe seller would be unhappy (43 %) or, may be happy (42 %); the producer would be very unhappy (50 %); and the government would either feel positive (36 %) or not be affected

at all (16 %). There are almost no age and sex differences in the answers to these questions, except for the fact that more 8 year old boys (27 %) than girls (7 %) believed that their mothers would not react to decreasing shoe prices.

### 3.2.2. Gold Mines

If gold mines were unexpectedly detected in Austria, according to 31 % of the children the economy would improve which is positive. Twenty-nine percent were rather skeptical, and 16 % thought that after such a discovery everybody would search for gold which is negative. Boys expected more positive consequences (59 %) than girls (45 %), such as wealth for everybody, wealth for those who found the gold, and economic growth. Girls were rather skeptical, mentioning more negative outcomes (53 %) compared to boys (39 %).

### 3.2.3. Taxes

One third of the children think that abolishing all taxes is not good. Especially older children are aware of the utility of taxes and said that abolishing them would either be negative or lead to both negative and positive consequences (13 %, 53 %, and 86 % of the respective age groups). Older children were able to discuss the problem from individuals' and from the state's point of view, whereas young children identified with the isolated citizen. Taxes are a complicated topic. Thus, it is not surprising that young children either said abolishing taxes is good (37 %, 37 %, and 10 % of the respective age groups) or were unable to answer (50 %, 10 %, and 3 %).

### 3.2.4. Distribution of Money

Two of the 8 year old boys and 1, 3, and 1 of the 8, 11, and 14 year old girls (equal to 6 % of the sample), respectively, did not know what would happen if the government decided to distribute lots of money among the people. Younger children were more inclined than older ones to favour such a project (the respective percentages for the three age groups responding favorably are 51 %, 41 %, and 39 %). Seven percent of the children claimed that distribution of lots of money was simply impossible. The others (32 %), especially 14 year old boys (60 % as compared to 29 % of the girls) think of negative outcomes such as people becoming less motivated to work and a breaking government.

## 3.3. Economic Attitudes

The last set of questions concerns attitudes towards poverty and richness. Only two questions were posed: (a) What are the reasons for poverty and wealth, and (b) what are the consequences of poverty and wealth. While 8 % of the youngest did not know any causes



of richness, one fifth of the pupils across all age groups were unable to mention reasons for poverty.

The causes most often mentioned were personal characteristics of the rich (35 %) and poor (31 %), the social system (24 % and 31 % for richness and poverty, respectively), and fate (10 %, 17 %). The only difference relative to age concerns attributions to fate. The older the respondents the more they perceived fate as a cause of richness (4 %, 12 %, and 13 %) and poverty (6 %, 9 %, and 36 %). The personal characteristics the children mentioned as being responsible for one's wealth or poverty, respectively, reflect social stereotypes according to which the rich are work oriented, intelligent, ambitious, and skilled; whereas the poor are unskilled, unwilling to work, and lazy. Only 6 children thought that some people might be rich because they cheated others or were criminal. Children mentioning one's fate and the socio-economic system as a source of poverty, talked about injustice in the distribution of work, said some people would not get better jobs or were unemployed.

Six percent of the children did not know any consequences of richness, and 15 % (4 % boys, 28 % girls) were unable to think of any consequence of poverty. The other children said wealth (35 %) and poverty (38 %) affected buying power; 26 % of the children thought the rich would be more self assured, whereas the poor suffer from psychological and social pressures and low self esteem (26 %). As negative consequences of richness, 26 % of the boys and 18 % of the girls mentioned the constraint of working hard, to have many unreliable friends, and the risk of being killed. Fifteen percent of the children perceived poverty as something positive and "clean", saying that the poor are happy, altruistic, and have plenty of time for their children.

#### 4. Conclusion

The most striking results concerning economic understanding are that almost all 11 and 14 year old children were able to indicate how prices of goods are determined. They knew that the shop keeper himself or herself does not fix prices individually but there is more than one party involved. With increasing age, the children became increasingly aware of the complexity of price determination and mentioned production costs, value tax, and the sellers' profit as relevant factors. Older children understood that the money the shop keeper asks for is not for his or her private use only but both for covering expenses for the store and for his or her own salary.

All older children already knew what salaries are, were aware of who pays them and of a high variance in people's incomes. As for salaries, the 11 and 14 year olds said the amount of money one earns depended on the specific job one holds, on the length one works

with a firm, on the type of firm, and also on personal characteristics. Older children tended to blame fate for one's income. The 8 year olds attributed income to the employee's personality. Consequently, the 8 year olds suggested that people having not enough money should work more, while the older children thought about strikes and negotiations with the boss, or on a new job.

Older children had more altruistic ideas about "unneeded" money, suggesting giving it to the poor. If the money was short, they would consume less, whereas the young pupils suggested working more, without being aware that increasing working time goes hand in hand with a decrease of leisure time. Whereas older children knew that possessing money leads to a high social status, the younger ones insisted on saying that it is important but did not know why.

The age differences noted in economic understanding were also observable when the children were asked about the possibilities of opening a factory. The youngest respondents thought money would be enough, whereas the older ones thought also of experience.

As for the right to make money, children of all age groups had rather unrealistic ideas. The older ones mentioned the bank, while the youngest had ideas such as the money comes from God or is made by the rich.

Age resulted in significant differences in understanding and knowledge of economic phenomena as well as in economic reasoning. Finding gold mines or distributing money is not simply positive, said the older children. Moreover, they also knew that taxes are useful.

Finally, the young pupils tended to attribute wealth and poverty individually, whereas older children reflected about personal and societal circumstances as well as about fate. These results resemble Despierre and Sorel's (1979) and Webley and Wrigley's (1983) findings on unemployment. Whereas personal characteristics, such as laziness, were perceived as a cause of unemployment by the young children; the older ones were not so certain. Personal characteristics may be both cause and effect. In this study, the older children tended to offer more societal and fatalistic explanations for poverty.

A few simple calculations should be added to summarize this report. There were 17 questions to which at least one of the 90 interviewed children gave more than one answer. If the number of answers a child presents can be taken as an index of development of economic knowledge, then the stepwise conformation to everyday understanding may be illustrated by this: On average, 6.6 out of the 30 youngest children gave more than one answer; at age 11 there were 11.3 children presenting more than one answer; and 14.6 children of the oldest group made two or three suggestions. These differences were present in both sex groups. The probability of a respondent presenting two or three answers

ranged from .20, .43 to .50 in the three male groups, and from .21, .32 to .47 in the female groups.

A preliminary comparison of the results of this study shows that Austrian children's knowledge is similar to the knowledge of children in other western countries (e. g., Roland-Levy, 1988; Leiser, 1983). No particularly significant sex differences were found in economic knowledge and economic reasoning. Whereas Roland-Levy (1988) observed that girls possess slightly more developed economic understanding than boys, Furnham and Cleare (1988) and the results of this study seem to be somewhat more in favour of the boys. However, these sex differences should not be considered important.

Age proved to show most differences. As do previous studies, the present results clearly demonstrate the existence of a developmental sequence from the simple awareness of the existence of economic concepts to specific knowledge. At around 11 years and more, children's notions of economic reality clearly changes and comes closely to conform the lay-adults' understanding of economy.

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