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# The cost of school failure: the Estonian experience

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# Education affects ...

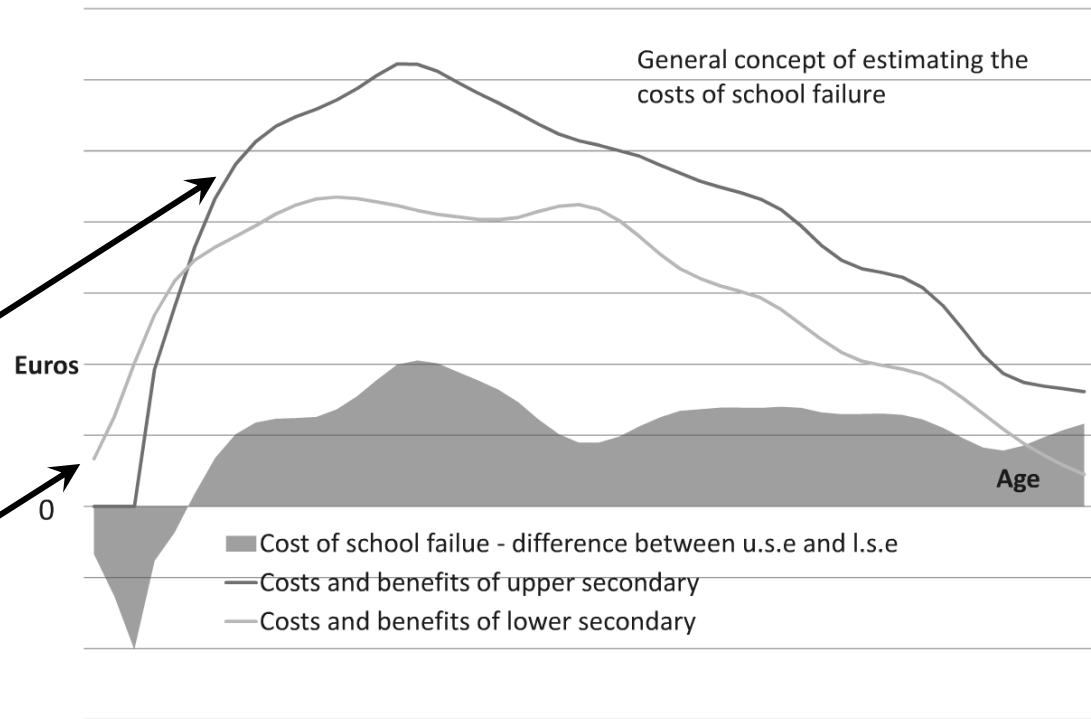
- **Wages** by increasing productivity
- **Tax revenue** by increasing taxable income and through general economic development
- **Health** by increasing incentives, skills and means to be healthy
- **Social security costs** by reducing the need for allowances, benefits and services
- **Criminal behaviour** by influencing values and reducing incentives to engage in criminal activities

# School failure is ...

- The failure of the **student** to achieve the minimum standard of cognitive skills deemed necessary for productive participation in the labour market and society in general, and at the same time the failure of the **school system** to provide services leading to successful learning.
- The concept is regularly simplified to the failure to complete some minimum level of education – *i.e.* **early school leaving** . In the case of the European Union, this means the completion of upper secondary education.

# What do we measure?

- the difference between lifetime costs and benefits associated with **upper secondary education** compared to **lower secondary education**



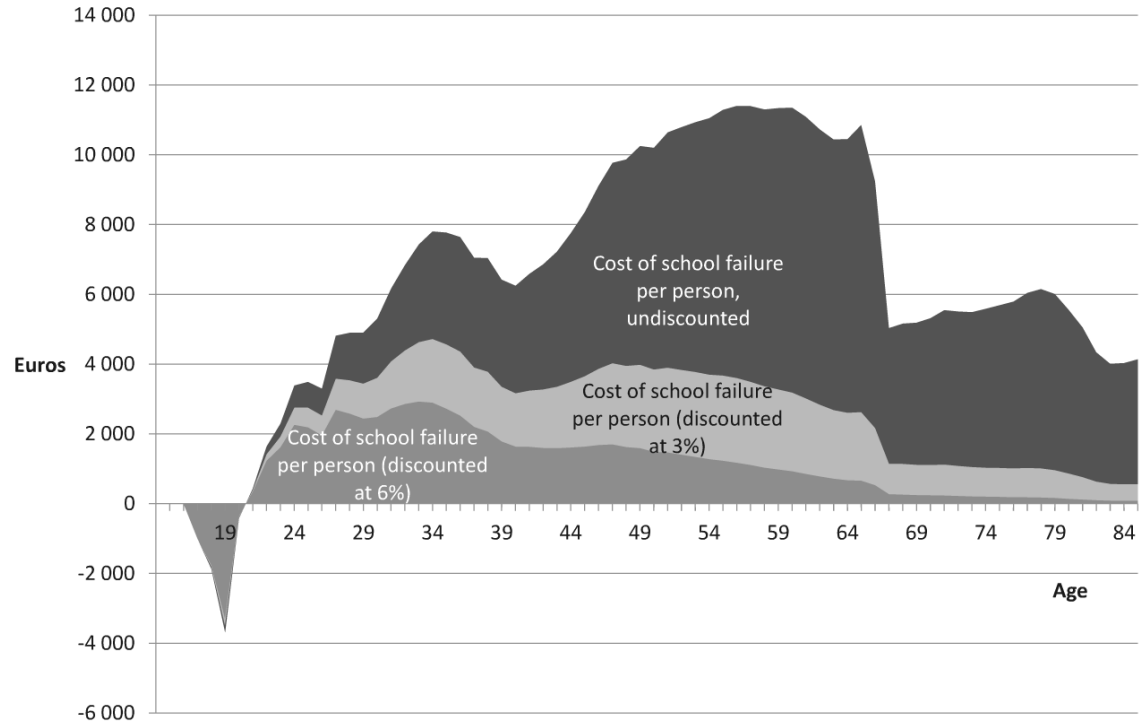
# In this analysis, we look at ...

- Net **wage**
- Tax revenues from **direct taxes** (income tax, social security tax and unemployment insurance contributions)
- Value of personal **health** (excluding the cost of health services)
- **Social security costs** related to allowances, benefits and old age pension (excluding costs of services)
- Costs of **crime** (mostly administrative costs, in case of human casualties also statistical value of life)

# Costs of school failure over the life cycle ...

depend a lot on what discount rate is used.

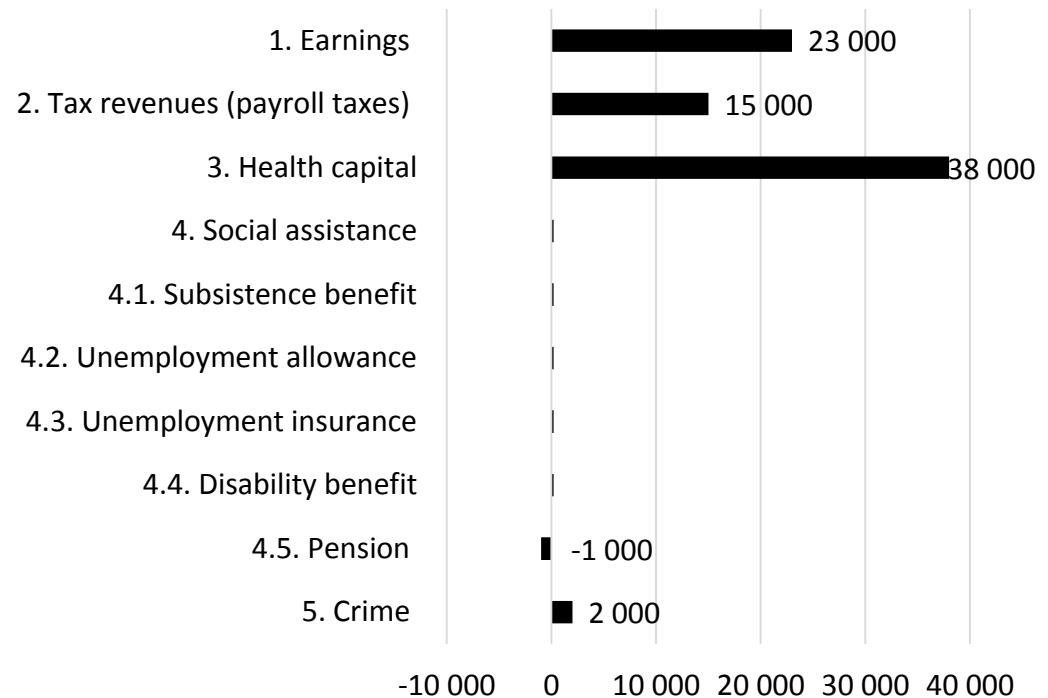
The higher the discount rate, the lower the impact of costs that occur later in life.



Usually a discount rate of 3% is used for developed economies, 6% is used for Estonian long term investment projects.

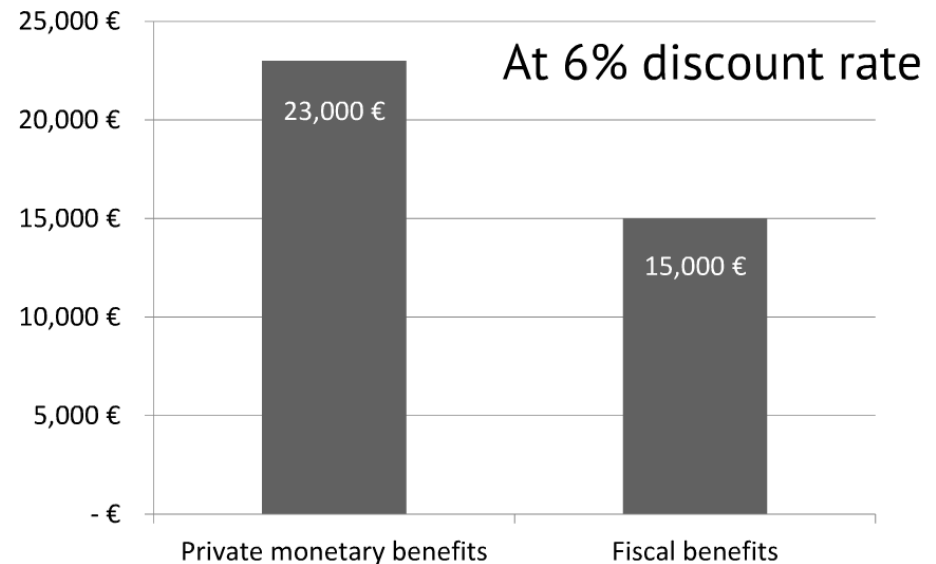
# Taking all of this into account...

If a person who has not attained an upper secondary school qualification were to complete this level of schooling, it is expected that the **net present value (NPV) of the savings for Estonia** associated with the receipt of this qualification would be **78 000 €** (at a discount rate of 6%).



# For guiding personal and public decisions ...

the direct financial gains per person amount to **23 000 € (NPV)** at the individual level (via higher wages) and **15 000 € (NPV)** at the government level (via higher tax revenue and lower social security costs).



Therefore, any measure that is effective in cutting early school leaving rates and costs less than 15 000€ per person will also be financially beneficial to the Estonian government.



# What should be done?

- There are a lot of different measures in Estonia, more attention should be devoted to assessing the effectiveness of these measures
- As a general principle, intervene as early as possible
- User-friendly early warning systems should be implemented
- For further suggestions from international experience, please see: *Lyche, C. (2010). Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving” OECD Education Working Papers, No. 53.*

# A word of caution

## **Correlation does not imply causality.**

There can be other factors influencing both educational attainment and life outcomes (like health and earnings).

While bringing the average person with only lower secondary education to the level of a person with upper secondary education would be beneficial to both the individual and society as a whole, it is still questionable as to how much of this transformation can be accomplished via the education system.

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