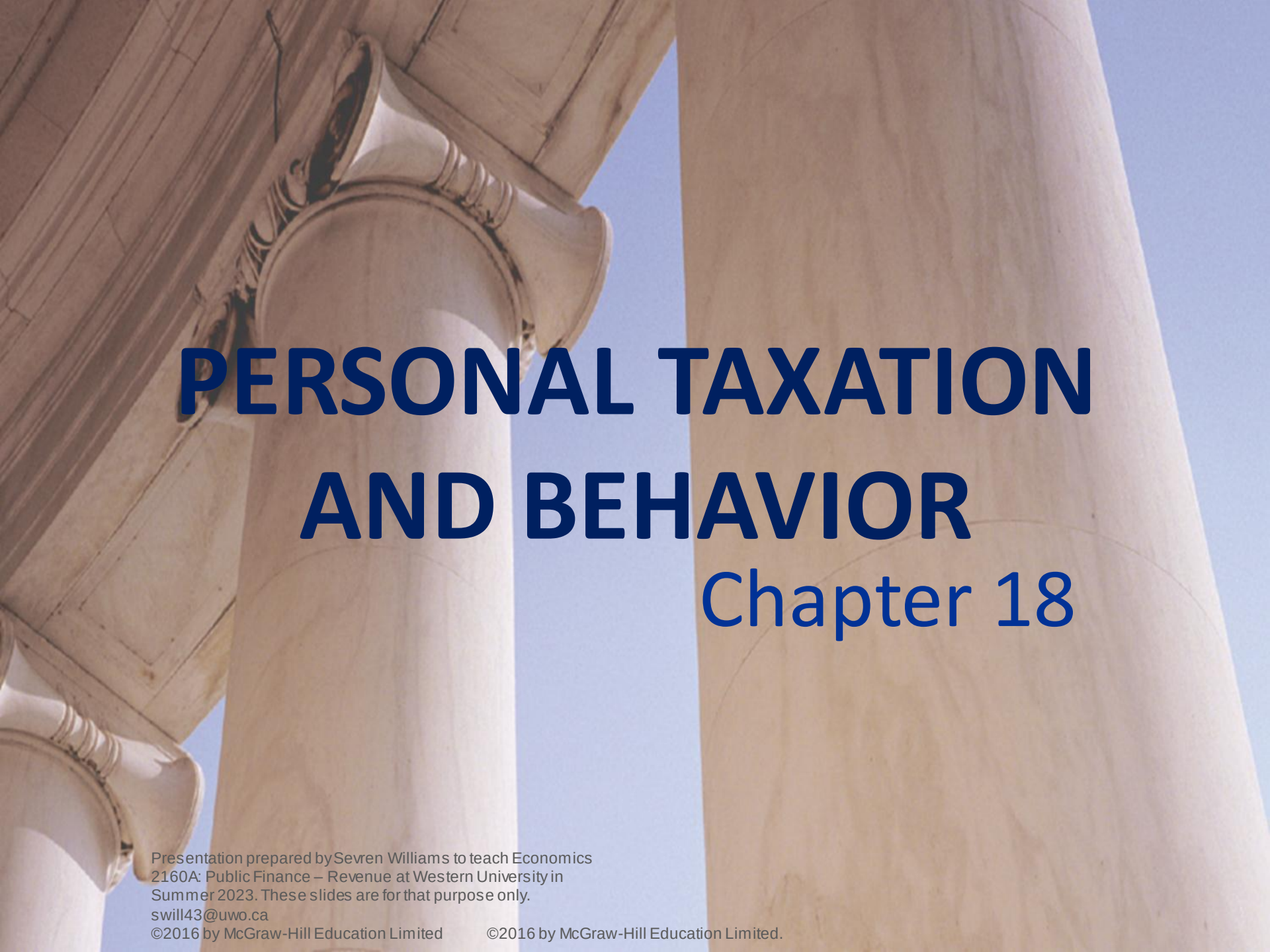

PERSONAL TAXATION AND BEHAVIOR

Chapter 18

Presentation prepared by Sevren Williams to teach Economics 2160A: Public Finance – Revenue at Western University in Summer 2023. These slides are for that purpose only.
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Savings

- The second type of behaviour that may be affected by taxation.
- Modern theoretical and empirical work on saving decisions → *life-cycle model.*
- Individuals' consumption and saving decisions are the result of a planning process that considers their lifetime economic circumstances.
- The amount you save each year depends not only on your income that year but also on the income that you expect in the future and the income you have had in the past.
- Life-cycle model can be used to explore the impact of taxes on saving decisions.

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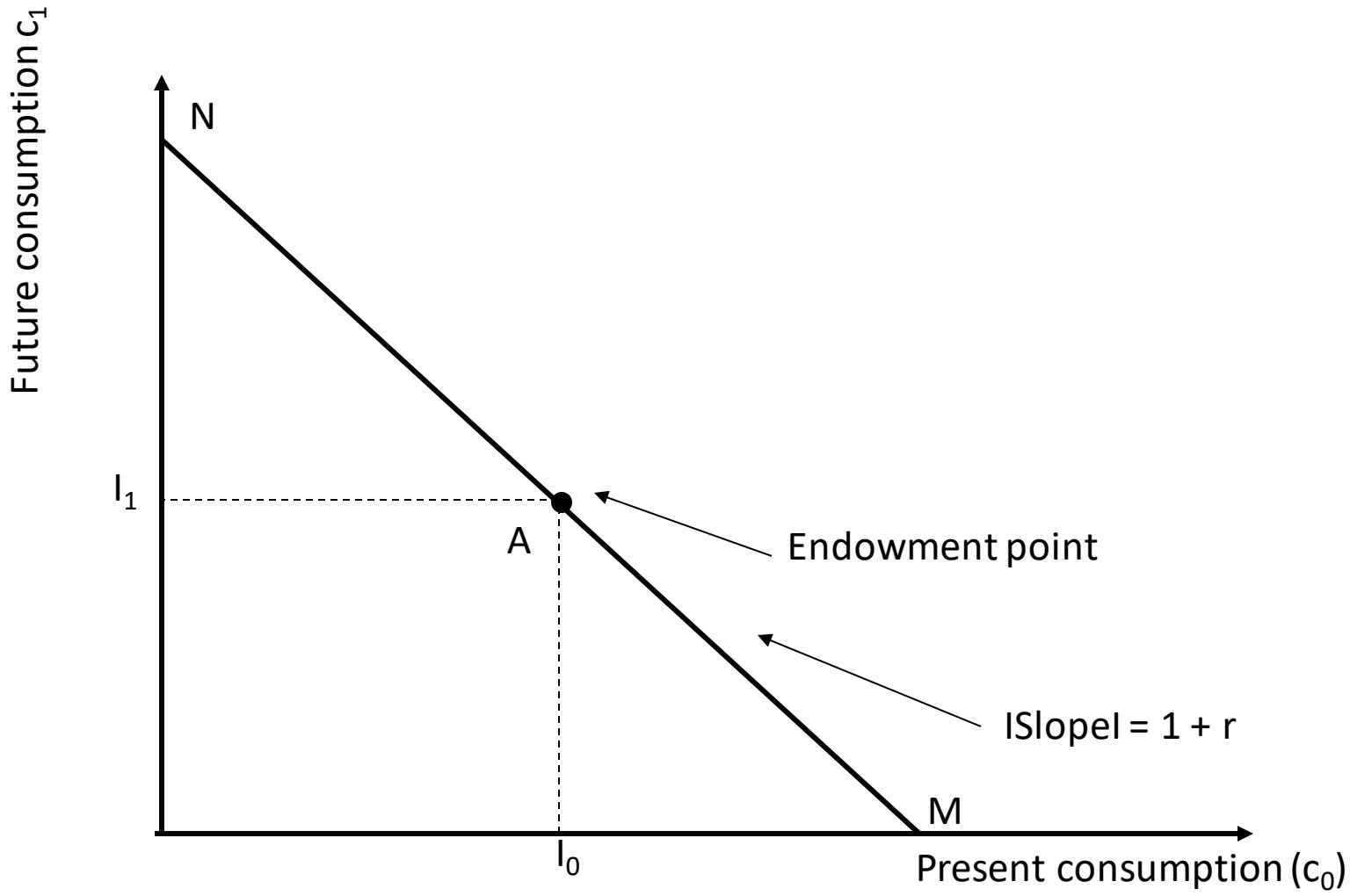
Utility-Maximizing Choice of Present and Future Consumption



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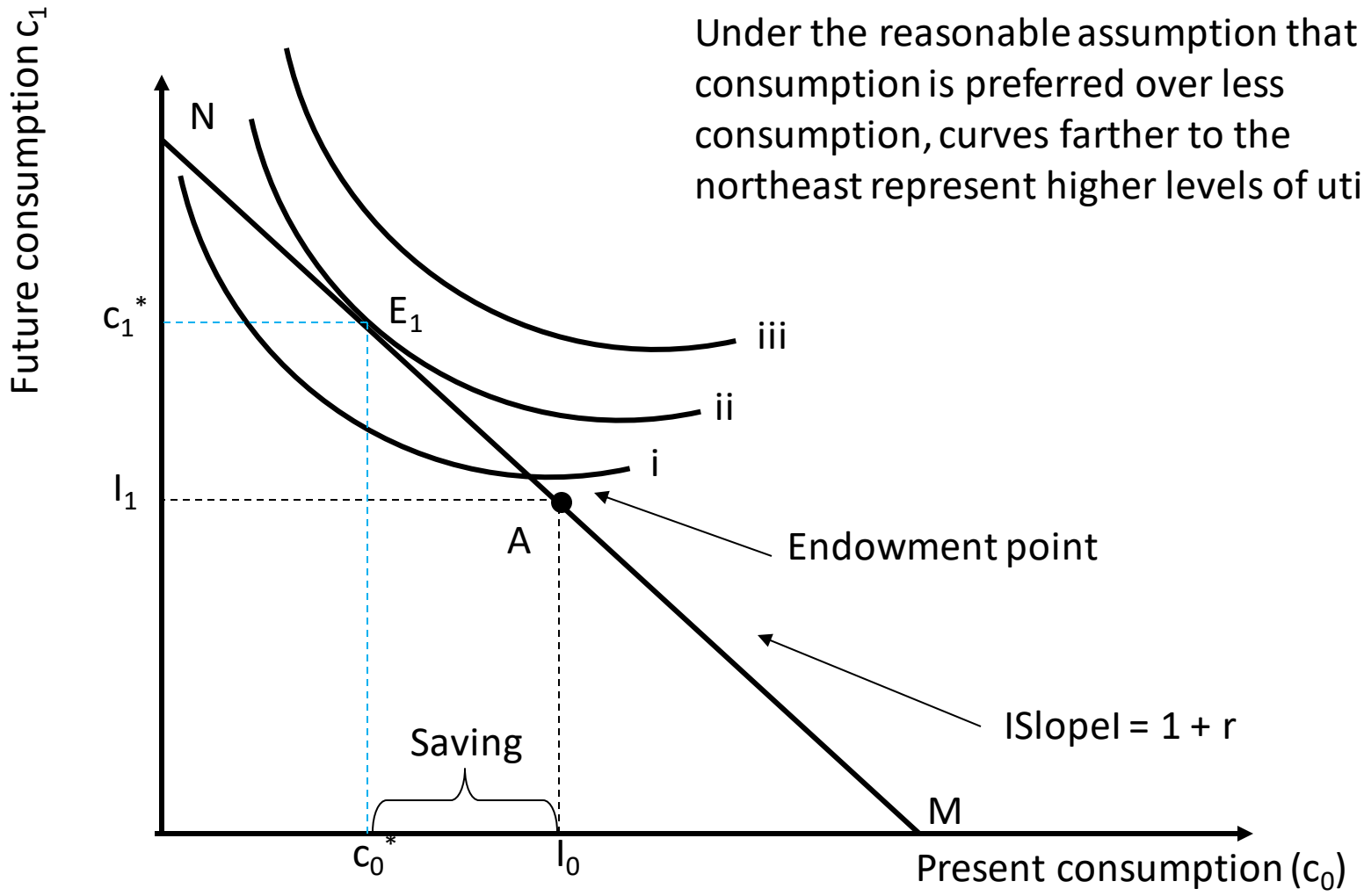
Utility-Maximizing Choice of Present and Future Consumption (cont.)



Under the reasonable assumption that more consumption is preferred over less consumption, curves farther to the northeast represent higher levels of utility.

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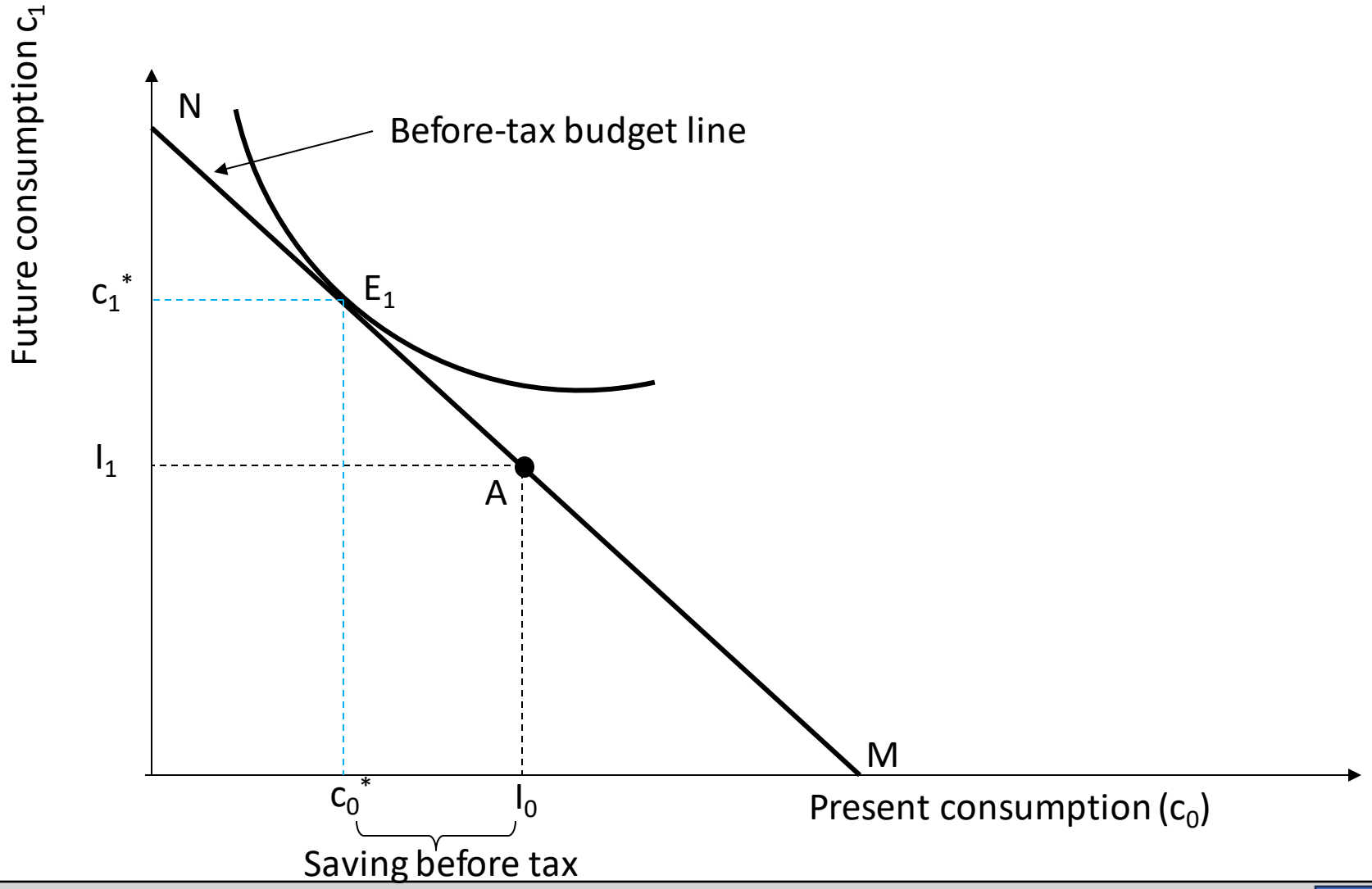
Interest Taxed and Interest Payments Deductible: Saving Decreases



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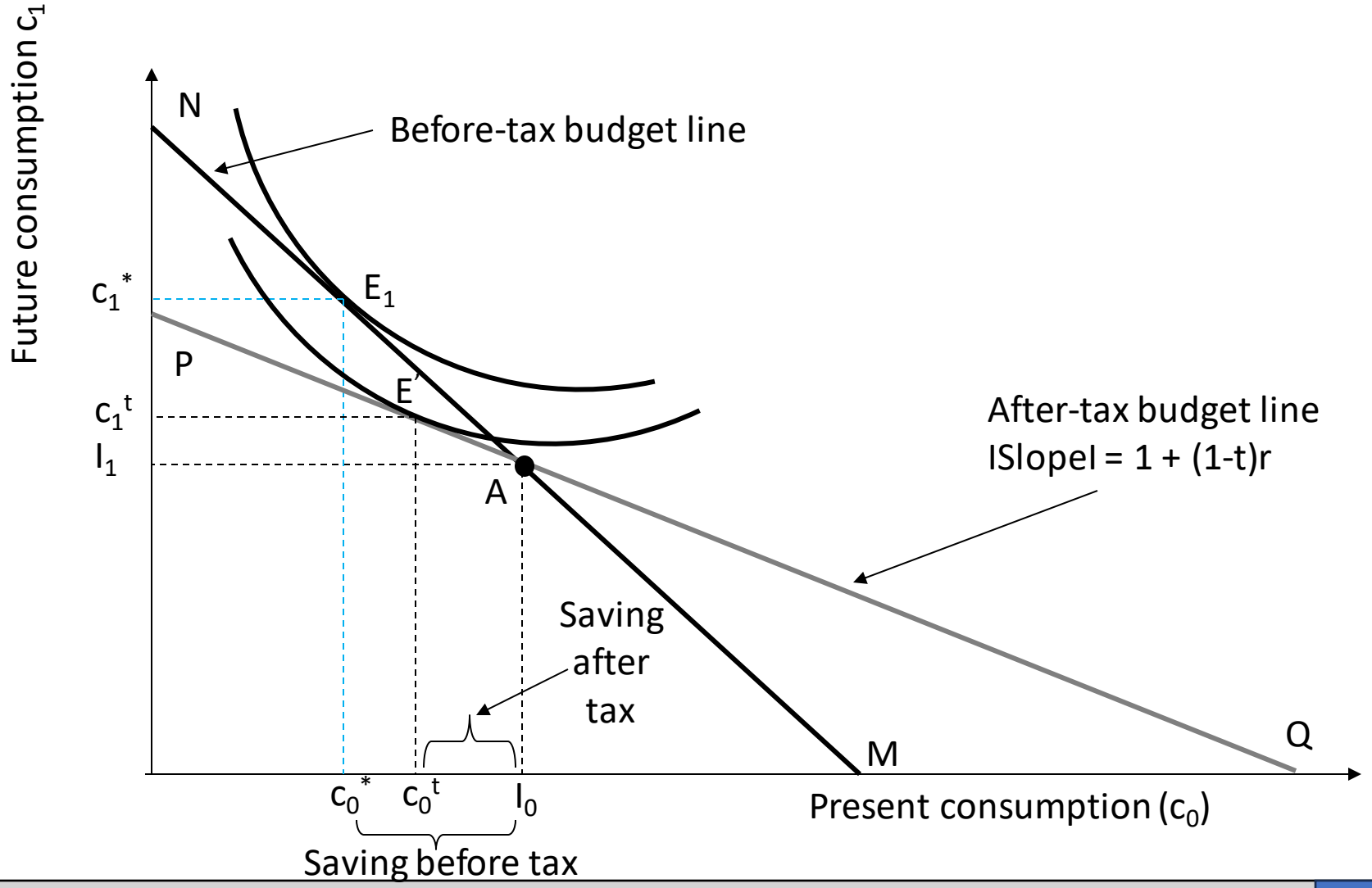
Interest Taxed and Interest Payments Deductible: Saving Decreases (cont.)



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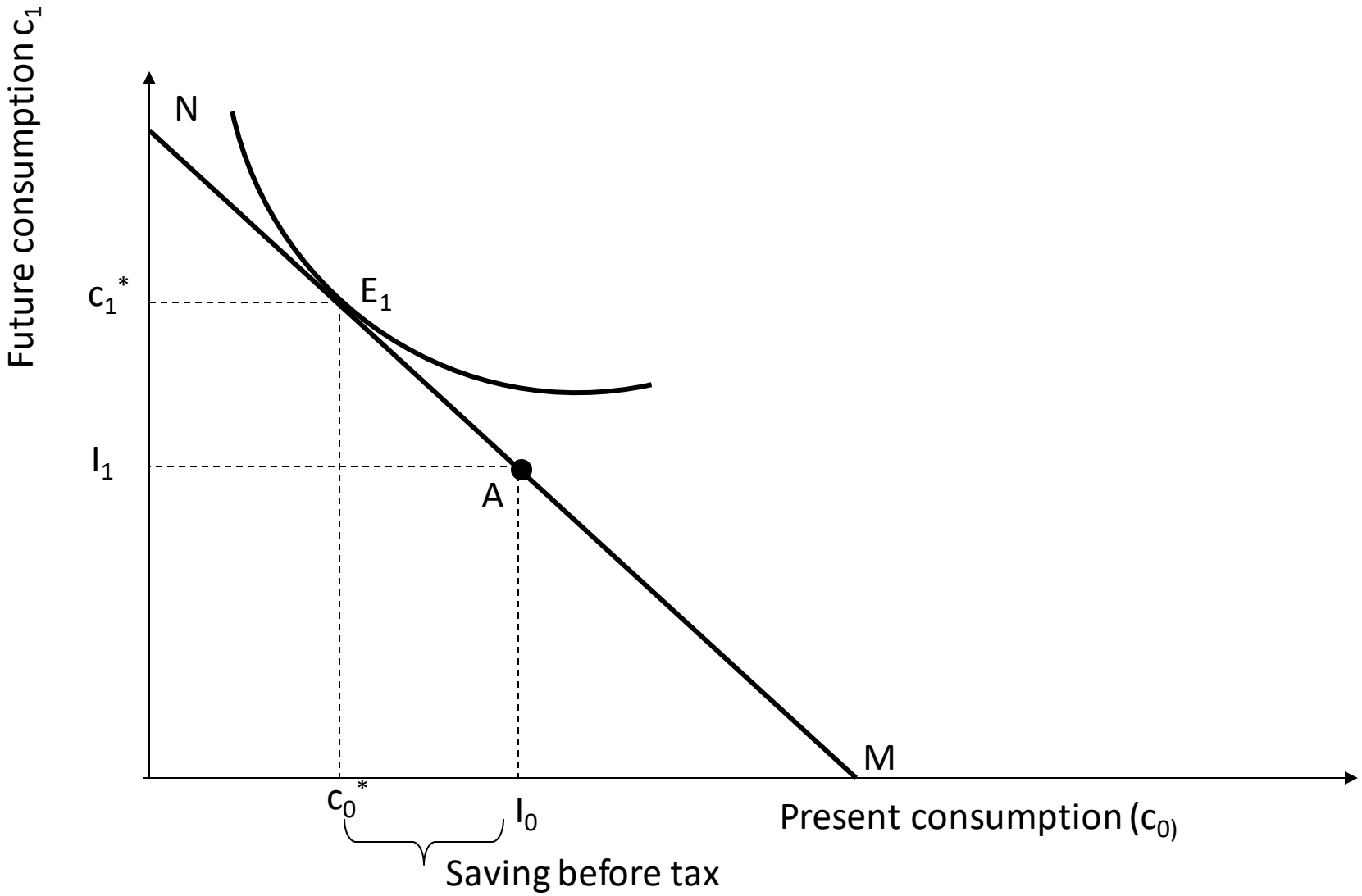
Interest Taxed and Interest Payments Deductible: Saving Increases



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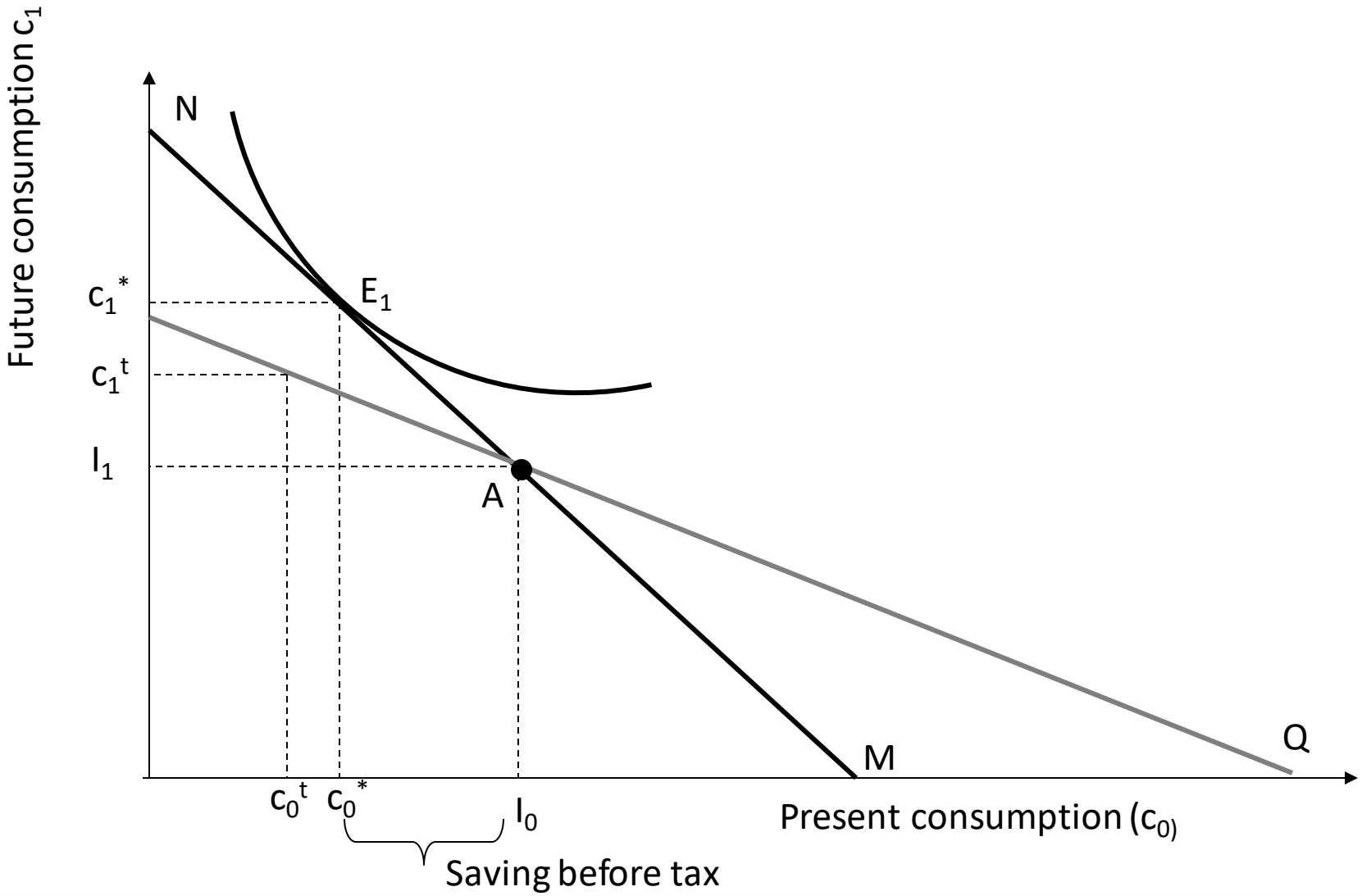
Interest Taxed and Interest Payments Deductible: Saving Increases (cont.)



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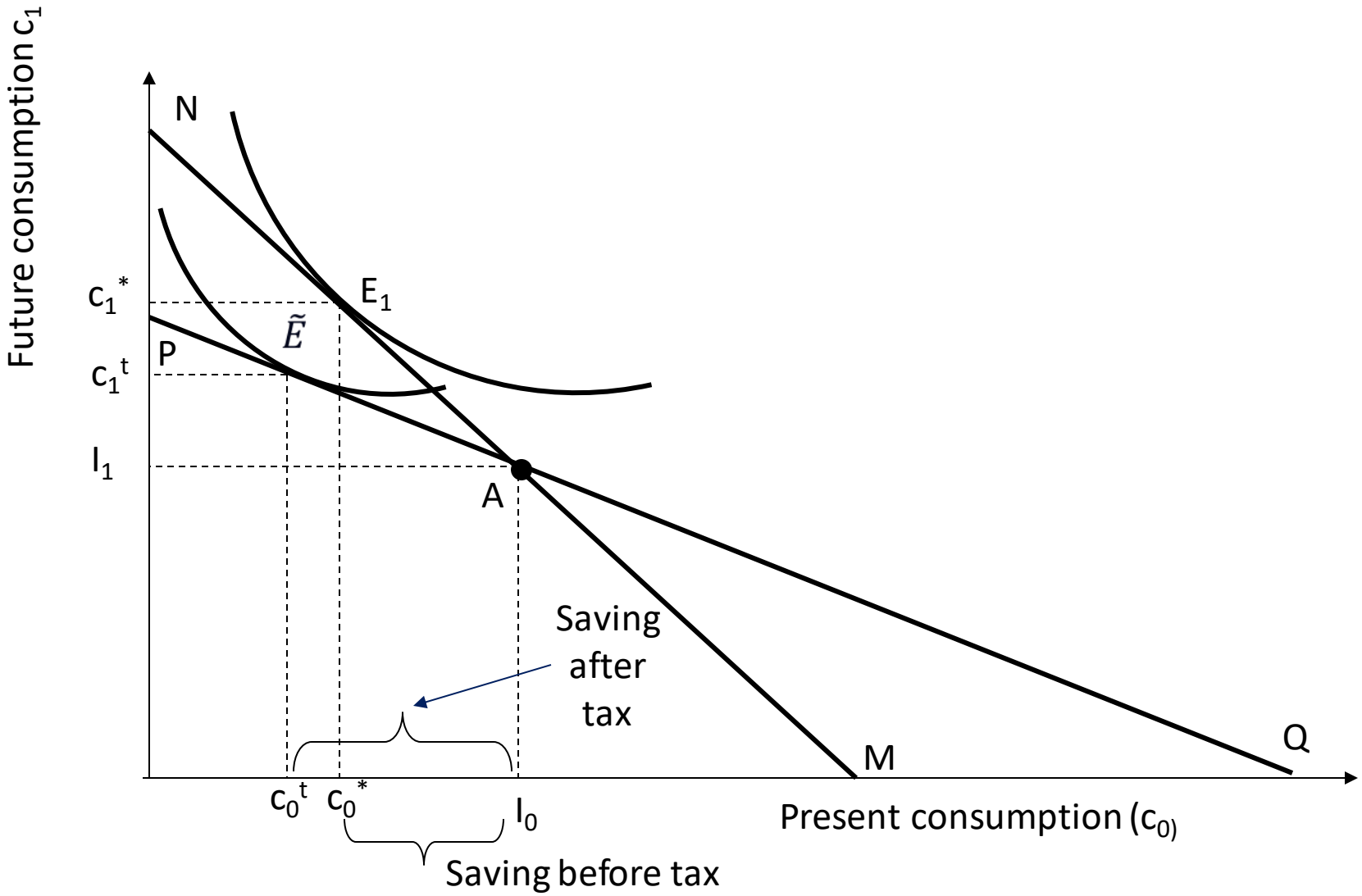
Interest Taxed and Interest Payments Deductible: Saving Increases (cont.)



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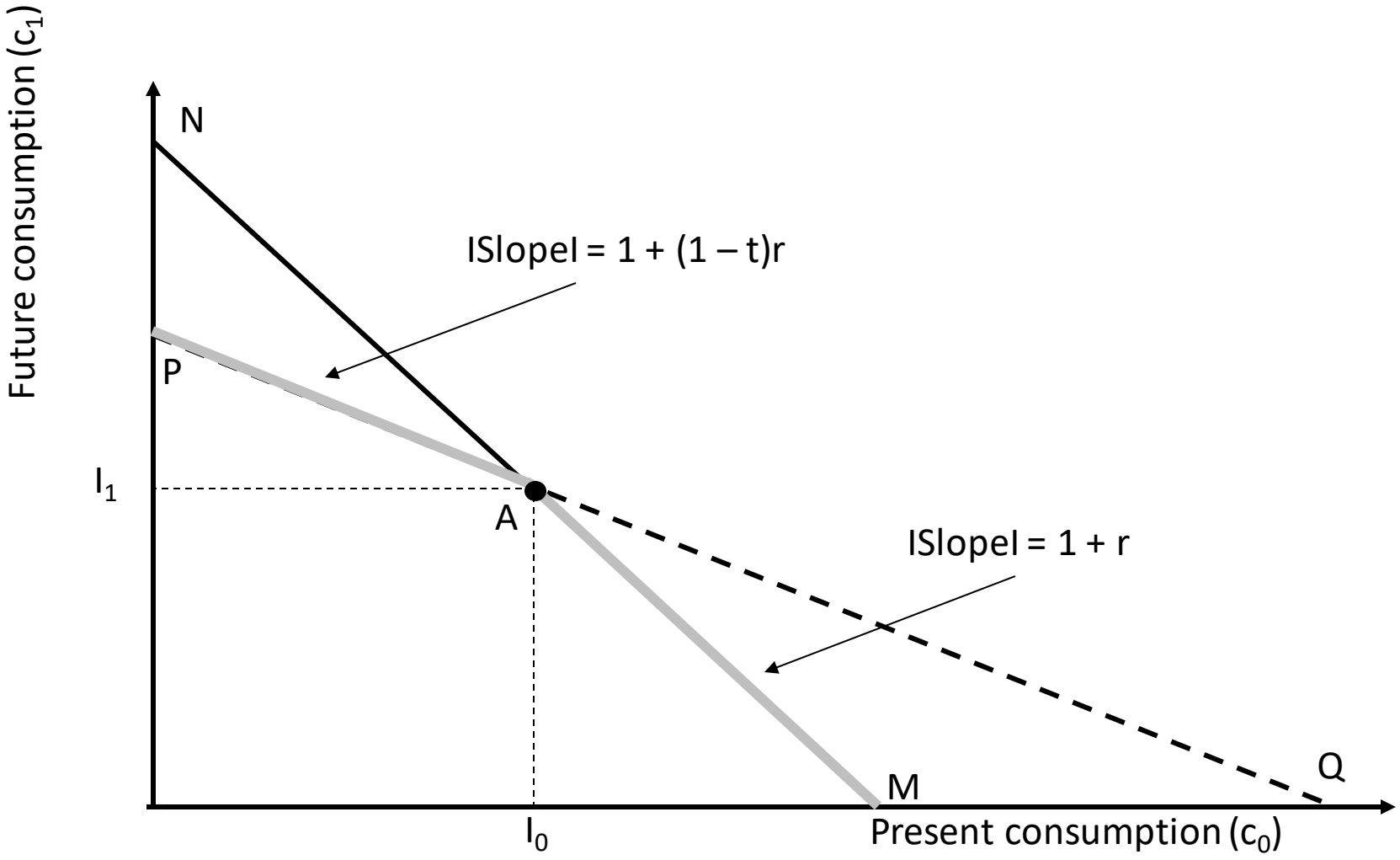
Interest Taxed and Interest Payments Nondeductible (cont.)



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Savings: Some Additional Considerations

- Real net rate of return
- Numerous assets
- Private saving versus social saving
- Validity of life-cycle model
- Empirical evidence: effect of taxation on saving
  - Beach, Boadway, and Bruce (1988): the impact on saving of changes in the real, after-tax rate of return is small in Canada.
  - McLure (1980): "Determining the effect interest rates have on saving is no mean trick. It involves considerable conceptual and econometric difficulties that still defy the best efforts of bright and dedicated economists."

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Savings: RRSPs, RPPs, TFSAs, and Saving

- Tax deductible (RRSPs, RPPs)
- Tax-free (TFSAs)
- Will increased limits on RRSPs stimulate new saving?

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Savings: Taxes and the Capital Shortage

Taxation of capital income receives at least as much public discussion as the taxation of wages.

Debate: by discouraging saving, the tax system contributed to a decline in investment, and in the capital stock of the country.

- A reduction of taxes on capital is needed to end the *productivity crisis*.
- Major problem: not obvious that taxation has reduced the supply of saving.

The new equilibrium may or may not involve a lower rate of investment and a lower level of productivity growth.

Has taxation of capital income led to large excess burdens compared to other ways of raising tax revenues?

What effect does a closed or open economy have?

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Labour Supply And Tax Revenues

- So far, our emphasis has been on finding the amount of labour supply associated with any given tax regime.
- We now explore the related issue of how tax collections vary with the tax rate.
- To start, we will consider a supply curve of labour, S_L. This curve will show the optimal amount of work for each after-tax wage, other things being the same.
- Further, hours of work will increase with the net wage—the substitution effect dominates.

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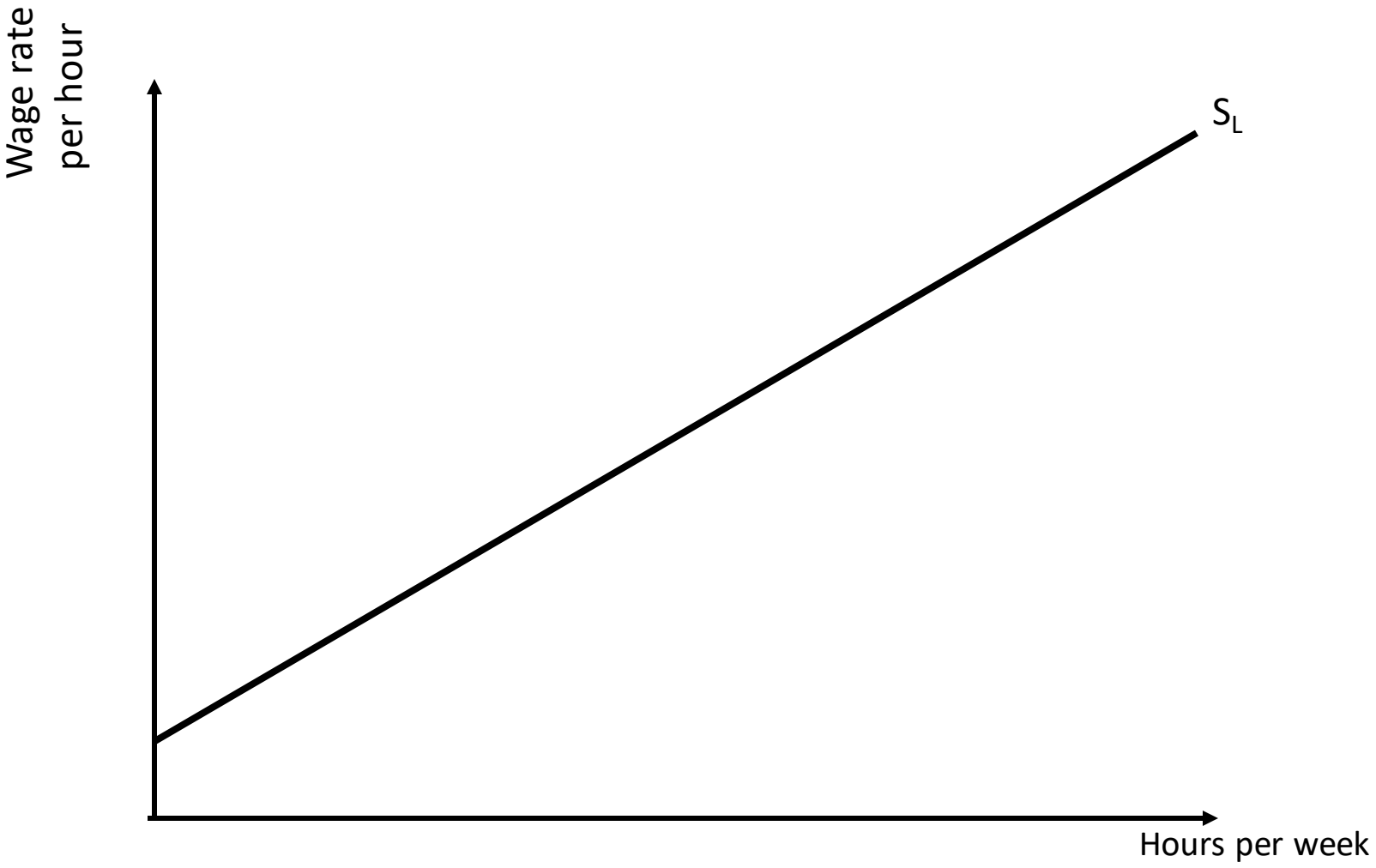
Tax Rates, Hours of Work, and Tax Revenue



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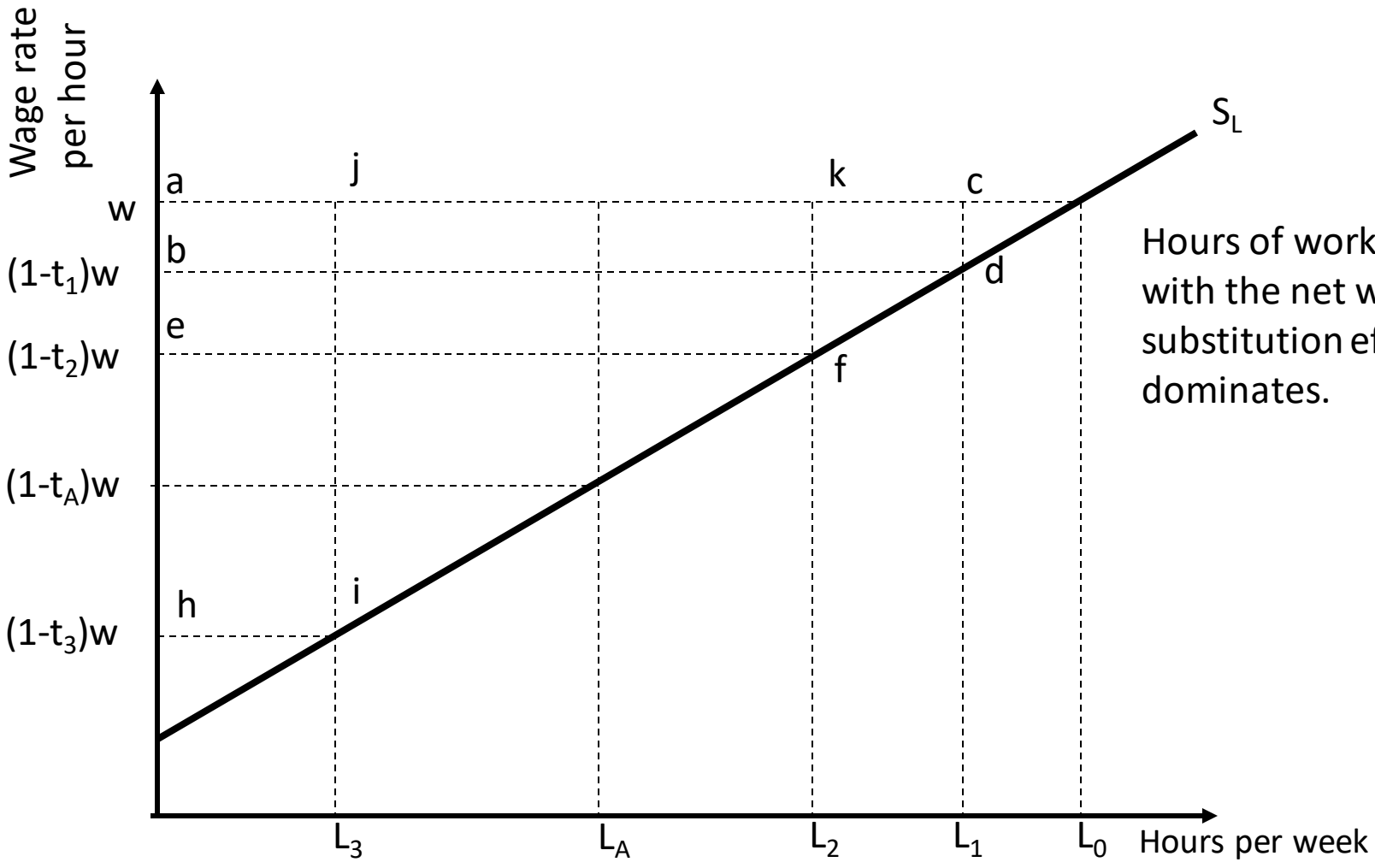
Tax Rates, Hours of Work, and Tax Revenue (cont.)



Hours of work increase with the net wage—the substitution effect dominates.

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Tax Rates versus Tax Revenue

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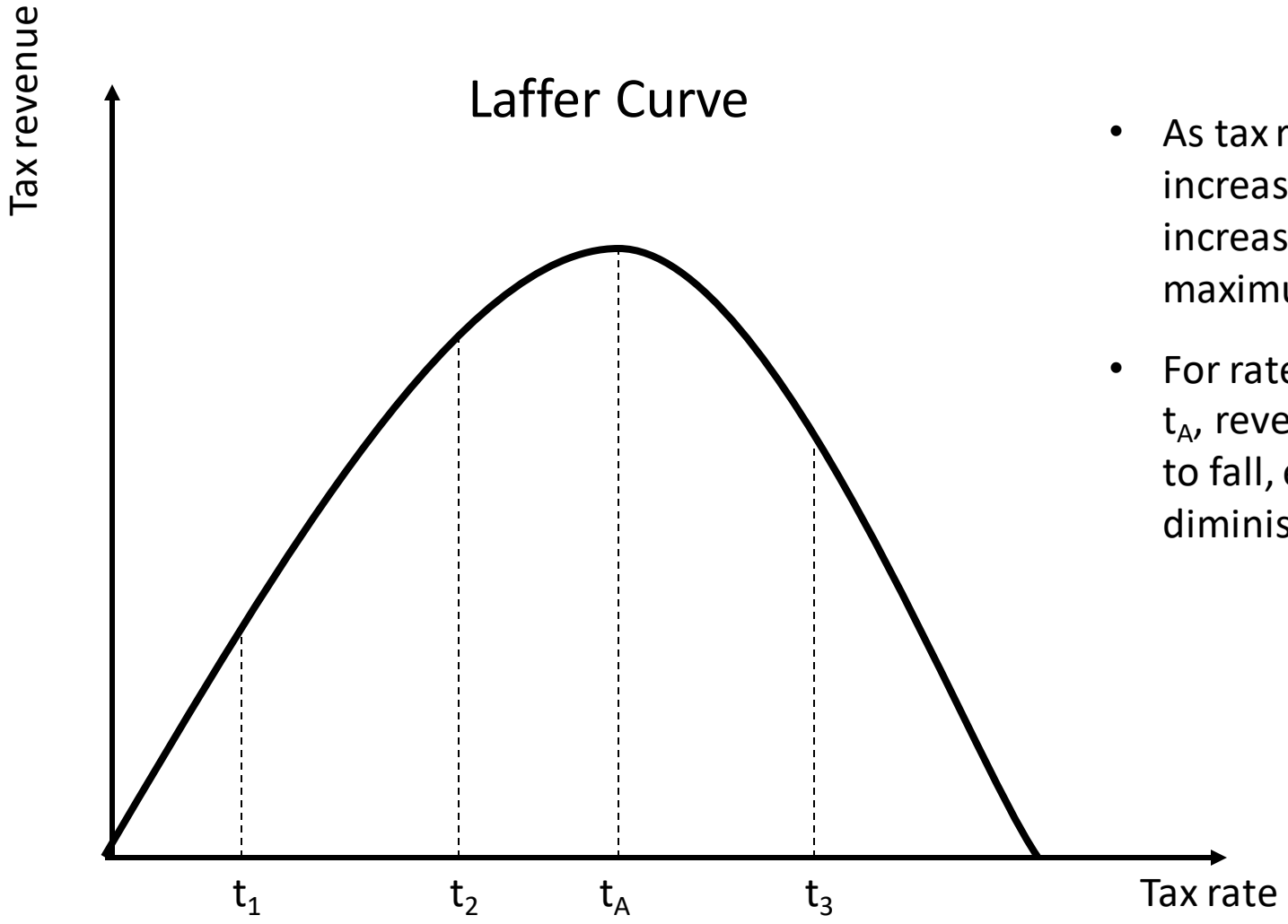
Tax Rates versus Tax Revenue (cont.)



- As tax rates increase, revenues increase, reaching a maximum at rate t_A.
- For rates exceeding t_A, revenues begin to fall, eventually diminishing to zero.

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Debate Over the Laffer Curve

- Popular debate surrounding the Laffer curve has been confused and confusing
- The shape of the Laffer curve and the elasticity of labour supply with respect to wages:
  - Whether tax revenues rise or fall is determined by whether changes in hours worked offset the change in the tax rate.
- Where on the Laffer curve is the economy operating?
- Other ways tax rates can affect tax revenues
- The informal (underground) economy
- Determining the optimal tax rate

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