## Beamer Example

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 This file is at
http://www.rasmusen.org/a/beamer-rasmusen.pdf

These notes are tips and tricks that I have found useful or thought might be useful. I wrote these for my own use and have not tried to make them clear for others, but some other people will find them useful.

Beamer is easy to use. It took me less than an hour, starting from no knowledge, to google info up, get Beamer working, and write these notes.

## Related Files

```
The source file for this pdf is at
http://www.rasmusen.org/a/beamer-rasmusen.tex
    See the "Beamer v3.0 Guide", 2004, at
http://faq.ktug.or.kr/wiki/uploads/beamer_guide.pdf.
    My latest Latex tips are at:
http://www.rasmusen.org/a/latex-rasmusen.txt
    My latex examples pages are at
http://www.rasmusen.org/a/latex-rasmusen.pdf and
http://www.rasmusen.org/a/latex-rasmusen.tex
```

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## Beamer Example, Page 1

The pause command will allow stuff to show up one click at a time. Just put \pause where you want the slide to pause till you use the downarrow or clicker.

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alertsdfwfddf and structuresdfsdfd gives colors.

Beamer's default is 22pt font.

Some commands I like to put before \begin{document}:

 $\label{lem:lem:late} $$ \user-a vigation symbols $$ \sup symbols $$$ 

 $\begin{tabular}{l} \begin{tabular}{l} \begin{tabu$ 

\beamersetrightmargin{.2in}

# Beamer Example, This Frame Using the [Squeeze] Option

We will view this person as consisting of three people, Self 0, Self 1, and Self 2, with utility functions:

$$U_0 = U(C_0) + \beta \delta(X + U(C_1)) + \beta \delta^2(-\alpha X + U(C_2))$$
 (1)

$$U_1 = X + U(C_1) + \beta \delta(-\alpha X + U(C_2)), \qquad (2)$$

and

$$U_2 = -\alpha XS + U(C_2), \tag{3}$$

with  $\alpha>1$ ,  $0\leq\delta<\frac{1}{1+r}$ , and  $0\leq\beta<1$ . If the person chooses to use the cocaine he receives X in period 1 and loses  $\alpha X$  in period 2, where we assume the loss is bigger than the gain, so  $\alpha>1$ . Utility is separable in consumption and cocaine use. For the first part of the paper we will assume utility is linear in consumption (U(C)=C); we will assume it concave when we come to consider "bequests" motivated by a consumption-smoothing.

## Beamer Example, This Frame Using the [Shrink] Option

I will have frequent occasion to refer to the assumption on the value of  $\delta$  that I made above so let us label it:

**The Consume-Early Assumption:** The person's rate of time preference is greater than the market rate of interest:

$$0 \le \delta < \frac{1}{1+r} \tag{4}$$

A common distinction in the behavioral economics literature is between sophisticated consumers, who are fully aware that they are time- inconsistent and adjust their behavior for that, and naive consumers who are not aware that their future self may choose differently. The model here is simple enough for the knowledge of time-inconsistency not to matter, but we will assume that consumers do have rational beliefs about what future consumers will do.

The motivation for the model is to set up as simply as possible a situation where a decision might be made when it has no immediate effect on utility (Period 0), at the time of a positive effect (Period 1), or at the time of a negative effect (Period 2).

#### Positive Analysis

In general when utility functions are non-exponential we must work back from the last period to the first. Self 0 controls the value of  $C_0$ , Self 1 controls X and  $C_1$ , and Self 2 controls  $C_2$ , but it will be interesting to see what each person would do if he controlled all of the decision variables

Self 2 would consume his entire wealth, so  $C_2 = W + (1 + r)(W_1 - C_1)$ . If he could choose variables from earlier periods, he would choose choose X = 0,  $C_0 = 0$ , and  $C_1 = 0$ : a ban on cocaine and zero consumption in the earlier periods so he would have more consumption himself.

### NOT ALL FRAMES NEED HAVE A TITLE.

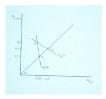
The Handout style in Beamer is pretty useless. It just takes out the overlay commands and prints one slide per page anyway. There is a way to print more per page, but it looks clunky too. Printing multiple pages using the PRINT command outside of latex doesn't work either, because too much white space is left around the text. We want a handout or notes page with just the essential text. Here's how I did it. I took out the beamer stuff, and replaced every begin frame command with bigskip hrule bigskip. I deleted all the \end frame commands and replaced \maketitle with \ I also put commands at the top to make the pages long and the text small. The next pages illustrate

### **DIAGRAMS**

I had a lot of trouble with diagrams (using the pause command with them, though I think that didn't cause the trouble). You're supposed to be able to use JPG files, but it didn't work. I opened the JPG file in Acrobat, and saved it as a PDF file. Then it worked fine. (In the example below, I use a JPG file and it seems to work just fine!)

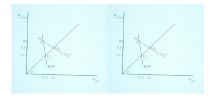
Also: if you leave blank lines between figures, they will display in a column. If you want a row, don't leave blank lines between them.

## DIAGRAM ILLUSTRATION



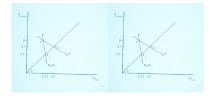
## DIAGRAM ILLUSTRATION

The command is like htis: \includegraphics[width=1in]{latex1.jpg}



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The command is like htis: \includegraphics[width=1in]{latex1.jpg}





## Some preliminary packages and commands I use

```
\documentclass{article}
     \usepackage{hyperref} \hypersetup{breaklinks=true,
pagecolor=white, colorlinks= true, linkcolor=black,
hyperfootnotes= false, urlcolor=blue } \urlstyle{ rm}
\usepackage{graphicx} \usepackage{amsmath} \usepackage{
amssymb}
     \reversemarginpar \topmargin -.8in \oddsidemargin -.1in
\textheight 10in \textwidth 7in
     \pagestyle{empty}
```

## Some preliminary packages and commands I use

```
\begin{document}
\bigskip \hrule \bigskip
{\footnotesize
{\bf { Quality-Ensuring Profits }}
SLIDE GOES HERE
```