Latex Examples with the subcaption and caption packages, Figure Vertical and Horizontal Alignments with Subfigures

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January 12, 2022

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1 Center alignment of a single figure

Figure 1 has the following features:

• Separate widths for caption and image.

```
% Included Package
\usepackage{float}
\usepackage{subcaption}
\usepackage{caption}
\captionsetup[figure]{labelfont={bf},name={Fig.},labelsep=period}
% Code
```

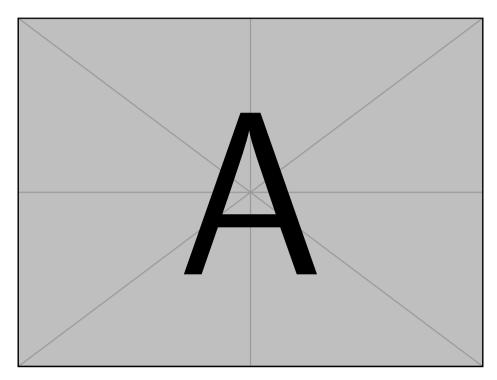


Fig. 1. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

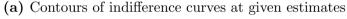
2 Vertical center align with subfigures

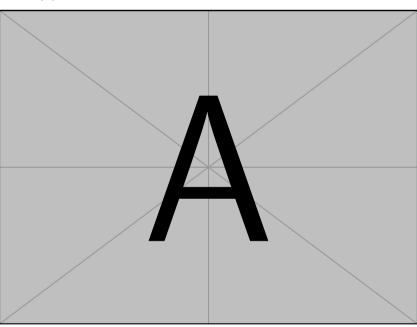
Figure 2 has the following features:

- An overall caption with width control
- Below figure notes with width control
- subfigure vertically center aligned

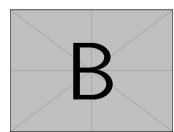
```
% Included Package
\usepackage{float}
\usepackage{subcaption}
\usepackage{caption}
\captionsetup[figure]{labelfont={bf},name={Fig.},labelsep=period}
\begin{figure}[H]
    \centering
    \captionsetup{width = .85\textwidth}
        \caption{\blindtext}
        \label{fig:vert}
        \begin{subfigure}[t]{0.45\textwidth}
        % Sub-caption
        \centering
                \caption{Contours of indifference curves at given estimates}
                \includegraphics[width=\linewidth]{example-image-a}
        \end{subfigure}
        \par\bigskip % this line generates two rows
        \begin{subfigure}[t]{0.35\textwidth}
            % Sub-caption
            \centering
                \caption{Vary $\mu_{R}$}
                \includegraphics[width=0.5\linewidth]{example-image-b}
        \end{subfigure}
        \par\bigskip
    \parbox[t]{0.90\textwidth}{\footnotesize \emph{Note:} \blindtext}\\
\end{figure}
```

Fig. 2. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.





(b) Vary μ_R



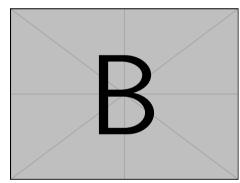
Note: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

3 Horizontal center align with subfigures

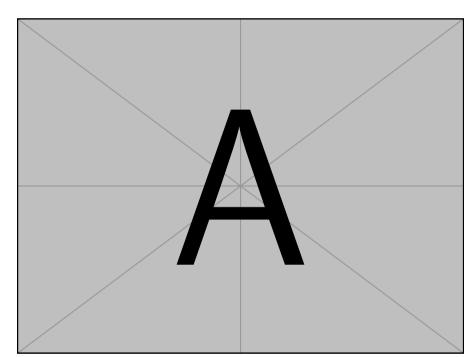
Figure 3 has the following features:

- Two subfigures on the same line, possibly exceeding pagewidth
- Long wrapped captions

```
% Included Package
\usepackage{float}
\usepackage{subcaption}
\usepackage{caption}
% Code
\begin{figure}[H]
    \centering
   \begin{subfigure}[t]{.51\textwidth}
        \centering
        % included graphics appear smaller than full
        \includegraphics[width=0.48\linewidth]{example-image-b}
        \caption{\blindtext}
    \end{subfigure}~
    \mbox{\%} tilde makes subfigures appear on the same row even if > 1.0 of textwidth
        \begin{subfigure}[t]{0.48\textwidth}
            \centering
            \% linewidth so that included graphics fills subfigure
        \includegraphics[width=\linewidth]{example-image-a}
        \caption{Vary $\mu_{R}$}
        \end{subfigure}
        \caption{\blindtext}
        \label{fig:horz}
\end{figure}
```



(a) Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.



(b) Vary μ_R

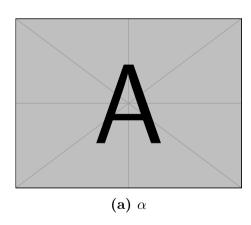
Fig. 3. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

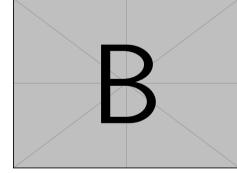
4 Horizontal and vertical center align with subfigures

Figure 4 has the following features:

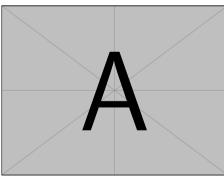
- Center align multiple rows of figures
- Caption width and wrapping same as subfigure width

```
% Included Package
\usepackage{float}
\usepackage{subcaption}
\usepackage{caption}
% Code
\newcommand{\subFigWidth}{0.27}
\newcommand{\subFigGraphWidth}{0.90}
\newcommand{\maincapwidth}{0.80}
\begin{figure}[H]
    \centering
   \begin{subfigure}[t]{\subFigWidth\textwidth}
       \centering
       \verb|\includegraphics[width=\subFigGraphWidth\linewidth]{example-image-a}|
       \captionsetup{width=\subFigGraphWidth\textwidth}
        \caption{$\alpha$}
   \end{subfigure}~
       \begin{subfigure}[t]{\subFigWidth\textwidth}
            \centering
       \verb|\includegraphics[width=\subFigGraphWidth\linewidth]{example-image-b}|
       \captionsetup{width=\subFigGraphWidth\textwidth}
       \caption{Primary school consolidation -- the closure of small community schools or their mergers into
           larger.}
       \end{subfigure}
        \par\medskip
        \begin{subfigure}[t]{\subFigWidth\textwidth}
        \centering
       \includegraphics[width=\subFigGraphWidth\linewidth]{example-image-a}
       \captionsetup{width=\subFigGraphWidth\textwidth}
       \caption{We consider heterogeneous treatment effects across groups defined at the intersections of
           minority status.}
    \end{subfigure}~
       \begin{subfigure}[t]{\subFigWidth\textwidth}
            \centering
            \captionsetup{width=\subFigGraphWidth\textwidth}
       \includegraphics[width=\subFigGraphWidth\linewidth]{example-image-b}
        \caption{Compared to villages with schools, villages whose schools had closed reported that the schools
            students}
       \end{subfigure}
        \captionsetup{width=\maincapwidth\textwidth}
        \caption{Results show that intersections of minority status, gender, and community characteristics can
           delineate significant heterogeneities in policy impacts.}
       \label{fig:verthorz}
\end{figure}
```

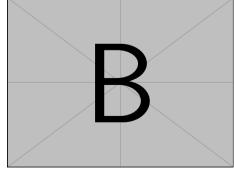




(b) Primary school consolidation—the closure of small community schools or their mergers into larger.



(c) We consider heterogeneous treatment effects across groups defined at the intersections of minority closed



(d) Compared to villages with schools, villages whose schools had closed reported that the schools students

Fig. 4. Results show that intersections of minority status, gender, and community characteristics can delineate significant heterogeneities in policy impacts.