

Academic Presentation Skills

National Institute for Environmental Studies

GOMI Kei

IEEE GCCE 2014

Makuhari, Japan

2014/Oct/10

Contents

About

1. What presentation is, and what it is not
2. No message, no value
3. Three fundamental rules of slides
4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

About

- “Academic” presentation

 - Basic principles of presentations
 - Message and story
 - Preparation of slides
 - Speech

 - Primary target: Graduate and undergraduate students
-

Japanese material in my blog..

「メッセージとストーリーのない発表はカスだ！
卒修論プレゼンテーションの心得」

五味研究室

[Keigomi29.hatenablog.com/](https://keigomi29.hatenablog.com/)

Twitter: @keigomi29

Contents

About

1. What presentation is, and what it is not
2. No message, no value
3. Three fundamental rules of slides
4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

An academic presentation is...

To show achievement of research

A short speech

Supported by projection of slides

Who are your audience?

Academic conference

Reporting in seminar

Public presentation of thesis

Invited speech in symposium

Speech for general public

Speech for students

...etc

Who are your audience?

Knowledge level

Language

Work experience

Expectation to your presentation

Age

Gender

Nationality

An academic presentation is not...

- To tell how you struggled
 - A movie
 - A novel, nor a poem
 - Comedy
-

Contents

About

1. What presentation is, and what it is not

2. No message, no value

3. Three fundamental rules of slides

4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

2. No message, no value

- What is your message?
 - Guide the audience by a good storyline
 - What you do not need is...
-

What is your message?

- “So what?”
- 1st Step: Write down your message!

(If the message itself is worthless...)

Forms of messages

1. Finding fact
 2. Finding problems and solutions
 3. Developing new products
-

Finding fact

I investigated A by B
and found C

- A) Object
 - B) Method
 - C) Fact
-

2. Finding problems and solutions

I investigated A, found B,
and propose C.

A) Object

B) Problem found

C) Proposed solution

3. Developing new products

I improved A by B
and solved C.

A) Object

B) Changes

C) New utility, solved problems

Abstract up to 80 words

- Longer version of the message
 - Criteria to judge your presentation
 - NEVER exceed 80 words (200 letters in Japanese)
-

Example

Message:

You can improve your presentation with only three basic principles.

Abstract:

The most important thing during preparation of academic presentation is to clarify the message and story. The next point is careful selection of information, large font size, color with defined roles, and appropriate graph type. For a good oral presentation? Rehearsal, rehearsal, and rehearsal! Then you can give a confident speech.

(51 words)

Guide the audience by a storyline

- Select the contents
 - Logically correct storyline
 - Natural order for the audience
-

Select the contents

- Long research and short speech
 - “Selling point”
 - Do not hesitate to cut off branches
-

Logically correct storyline

Bad example

Objective: To investigate math of A

Method: Decompose A using B

Result: Velocity was C

Natural order for the audience

- Structuring: “Whole to detail”
 - Show the map
 - Easy to imagine the next contents
-

Structuring whole to detail

Bad example

1. Prepare scale and flour
 2. Measure 200g of flour and add 1 cup of water
 3. Prepare to whip cream
 4. Prepare cream and sugar
 5. Cook the dough with a pan
 6. Whip the cream
 7. Put whipped cream on cooked dough
 8. Pour chocolate on
-

Structuring whole to detail

Improved: 【Recipe of cream crape】

1. Bake the dough of crape
 1. Prepare scale and flour
 2. Measure 200g of flour, add 1 cup of water, and knead the dough
 3. Bake the dough with a pan
 2. Whip cream
 1. Prepare 200ml of cream and 15g of sugar
 2. Whip the cream with sugar
 3. Serving
 1. Crack a chocolate
 2. Put the whipped cream on baked dough
 3. Put the chocolate on //END
-

Tips of structuring

- Include all
 - No duplication
 - Not too many in one level
-

Easy to imagine the next contents

- Expected contents comes next
 - End with ending contents
 - Say the hint, show the map
-

What you do not need

- Surprise the audience
 - Show detailed branches
 - Tell how hard your work was
-

Message and story

- Write your message

- Forms
- Abstract in 80 words

- Story line

- Logic
 - Whole to detail
 - Expected next contents
-

Contents

About

1. What presentation is, and what it is not
2. No message, no value
3. Three fundamental rules of slides
4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

3. Three fundamental rules of slides

- Every slide has one message
 - Best slide has least information
 - Larger fonts, clear colors
-

Every slide has one message

- Decide the role of the slide
 - Message title vs Topic title
 - How to show the message?
 - Write, Draw, and Say
-

How to decide the role?

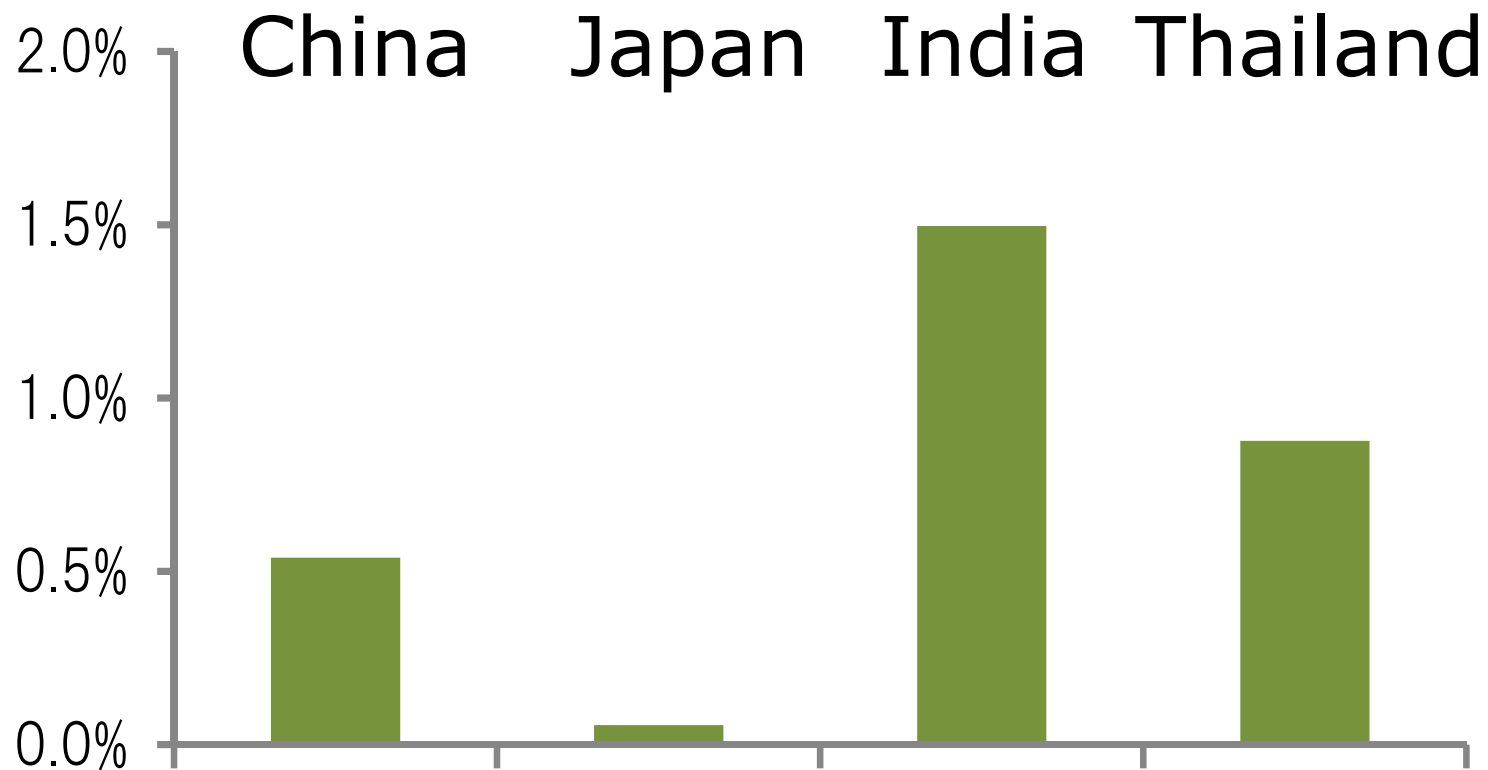
- Structuring: Whole to Detail
 - Decompose to one-slide level
 - Message of each slide is naturally decided
-

Message title and Topic title

- “Eye Catcher” : Shorter is better
 - Message title is direct and powerful
 - Topic title must be short and simple
-

Population growth rate

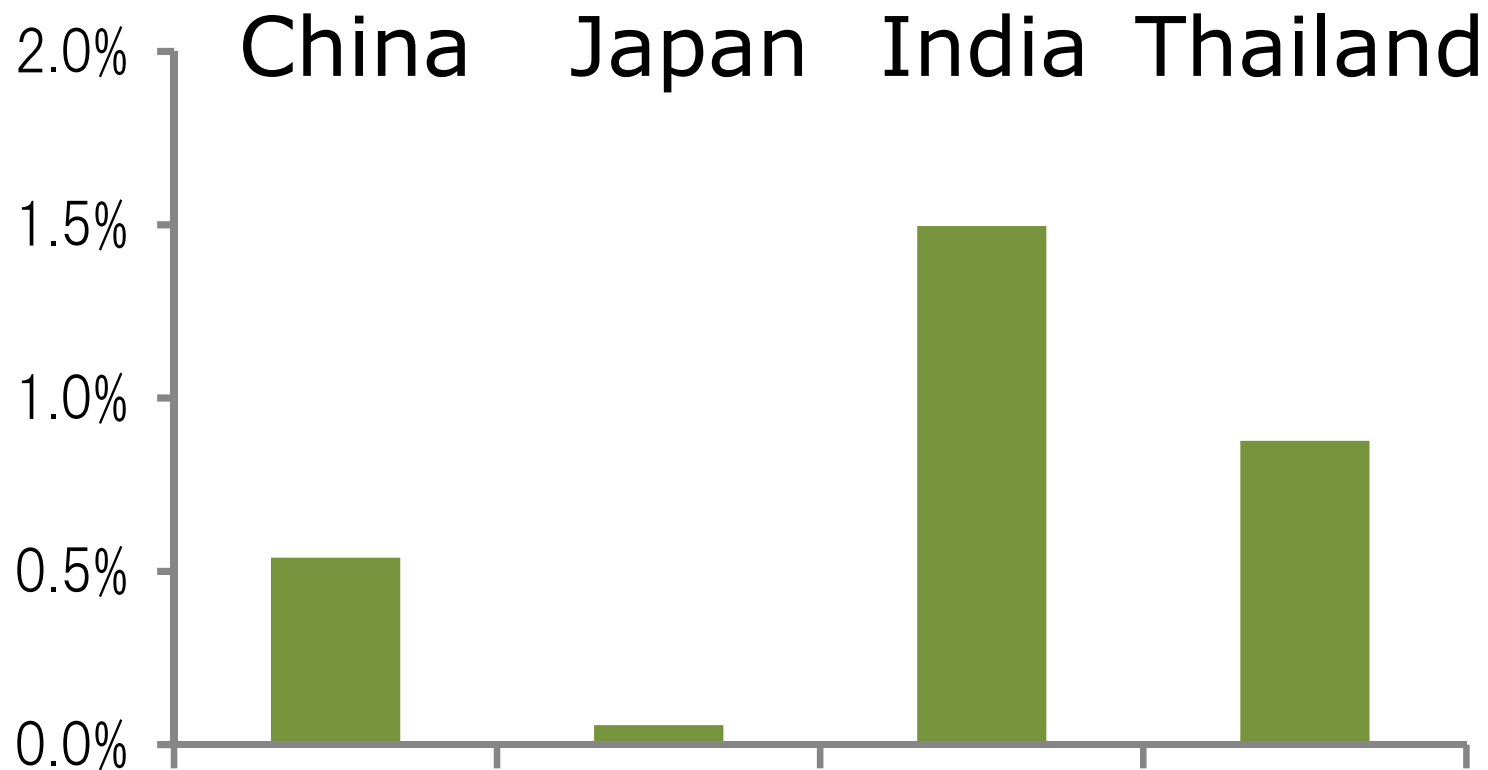
Average annual growth rate between 2001 to 2010



Source: UN Population Division (2010) World Population Prospects 2010

India has high growth rate

Average annual growth rate between 2001 to 2010



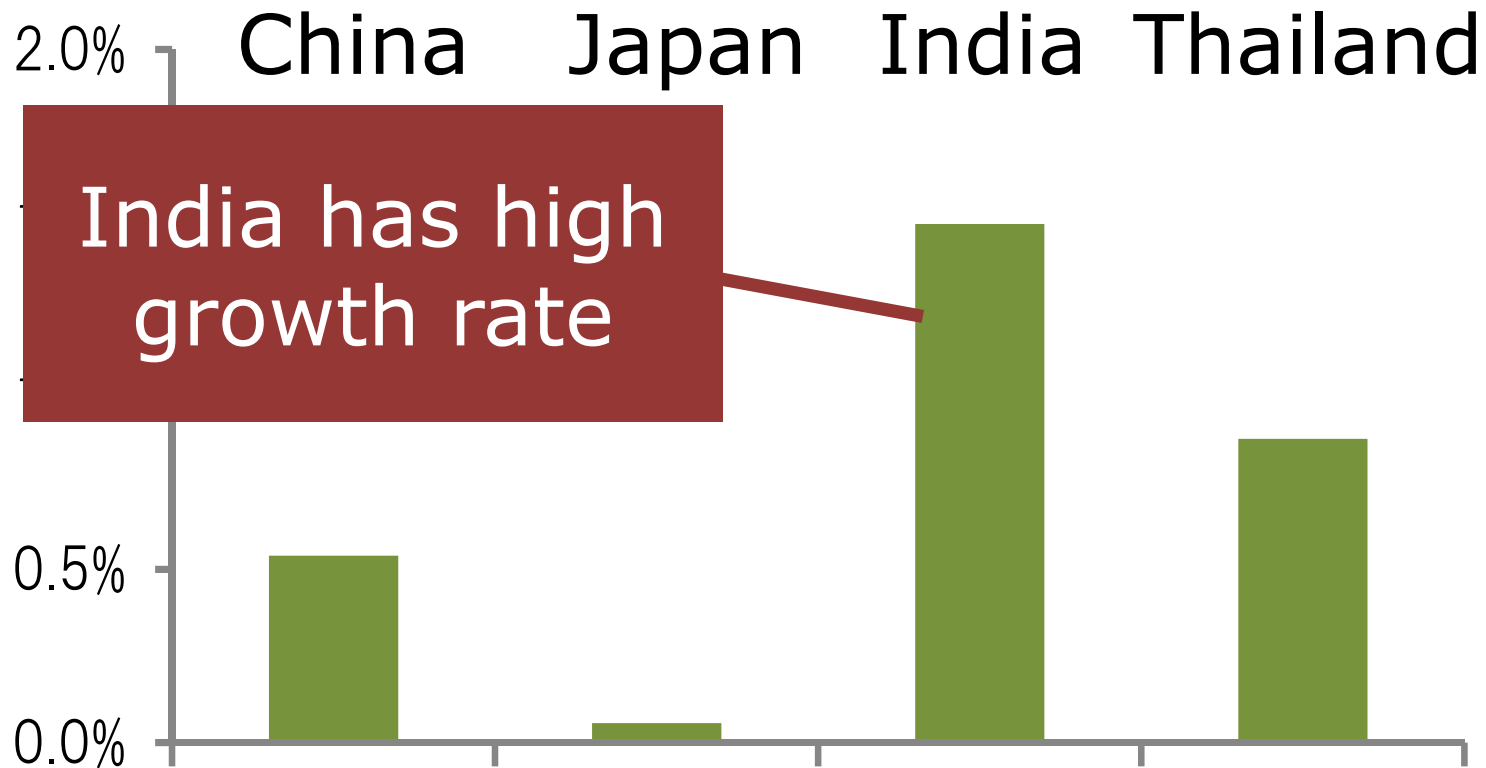
Source: UN Population Division (2010) World Population Prospects 2010

How to show the message?

- Say
 - Writing is easier way
 - Technique of graphic
-

Population growth rate

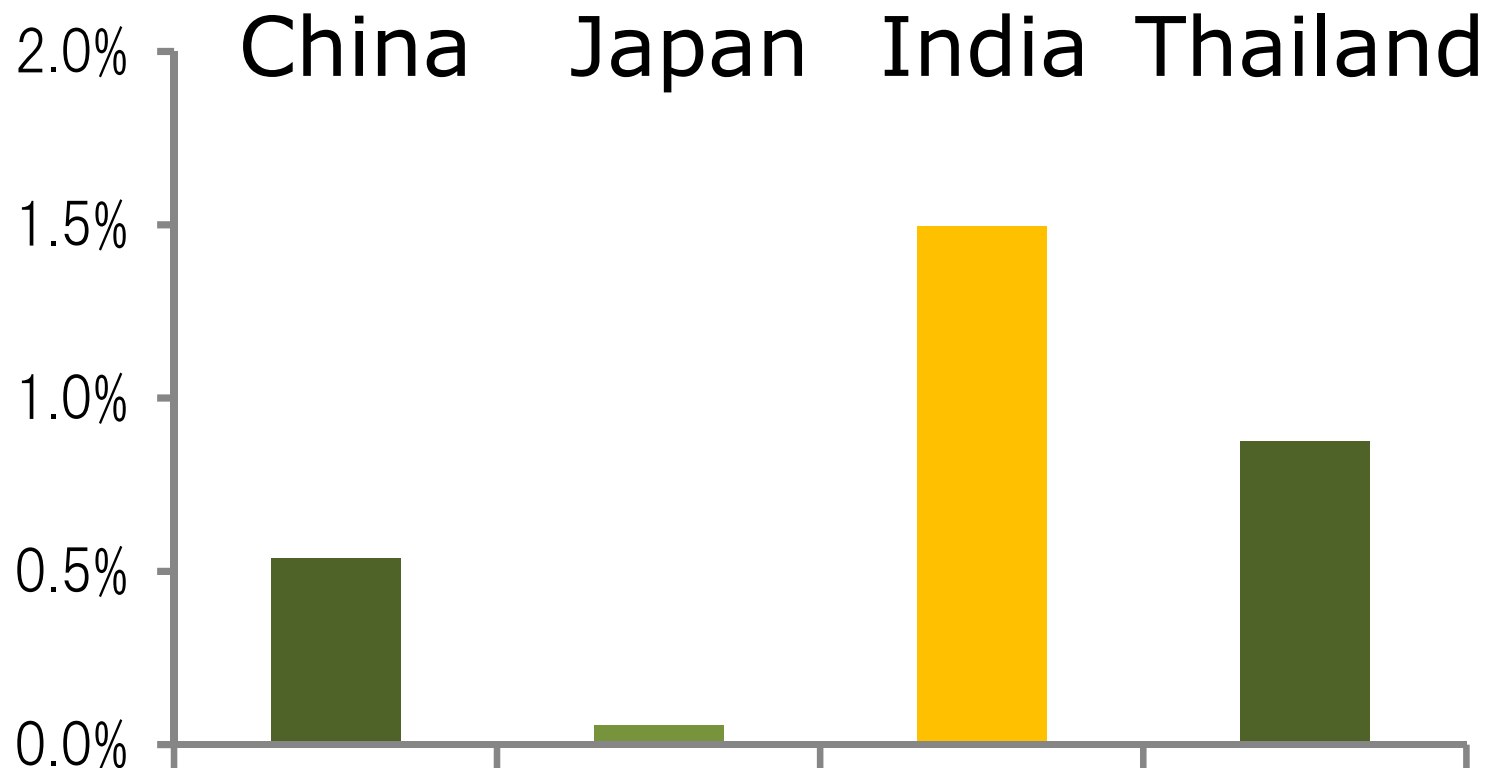
Average annual growth rate between 2001 to 2010



Source: UN Population Division (2010) World Population Prospects 2010

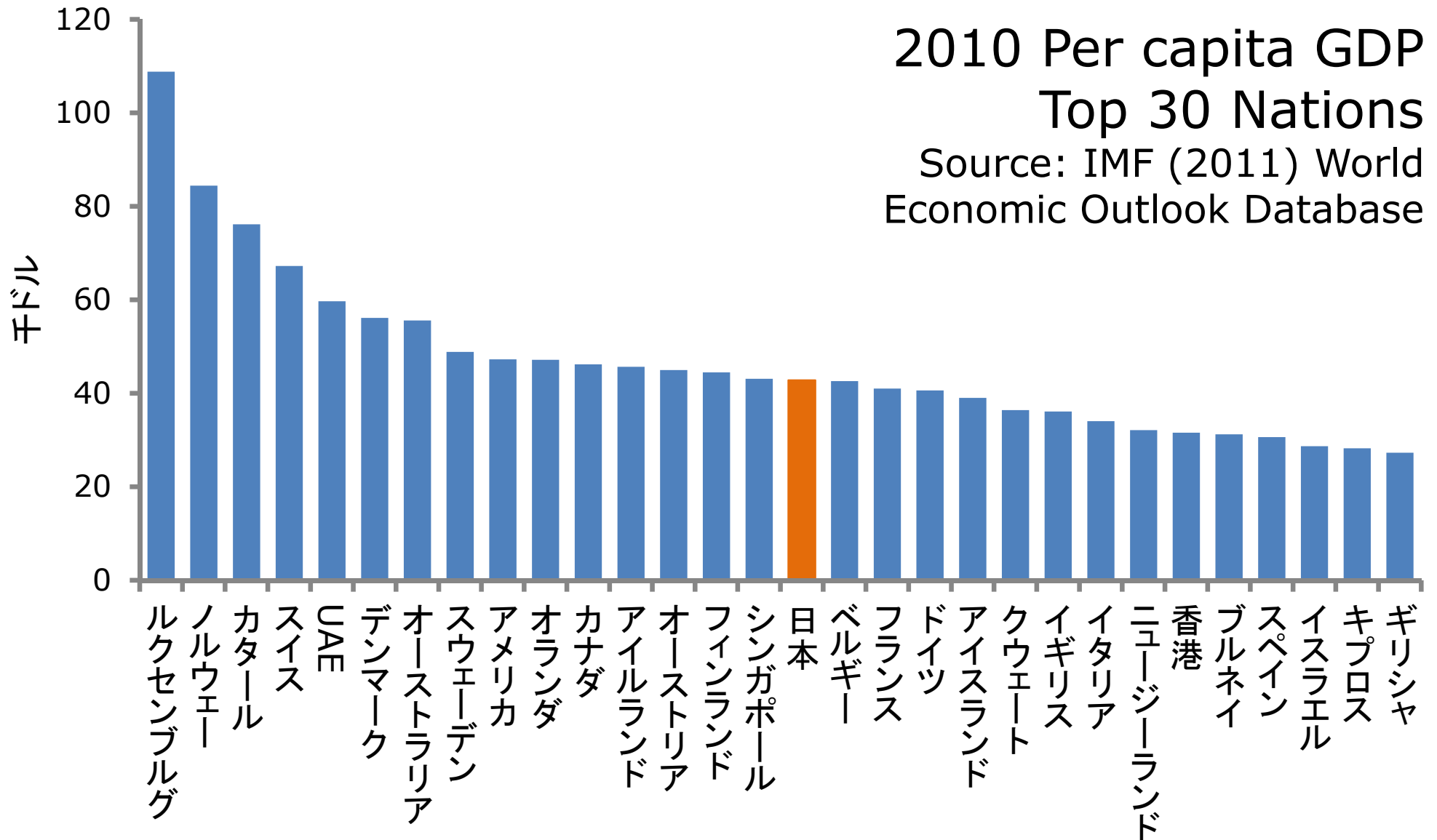
India has high growth rate

Average annual growth rate between 2001 to 2010



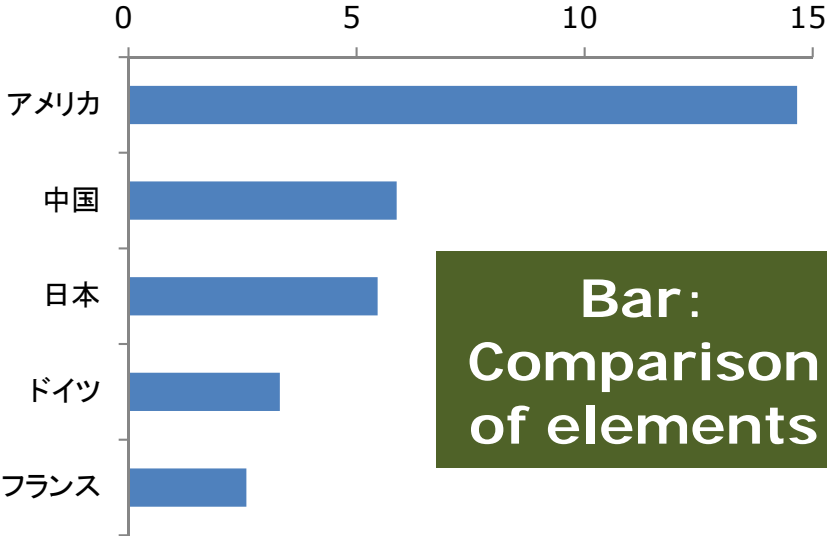
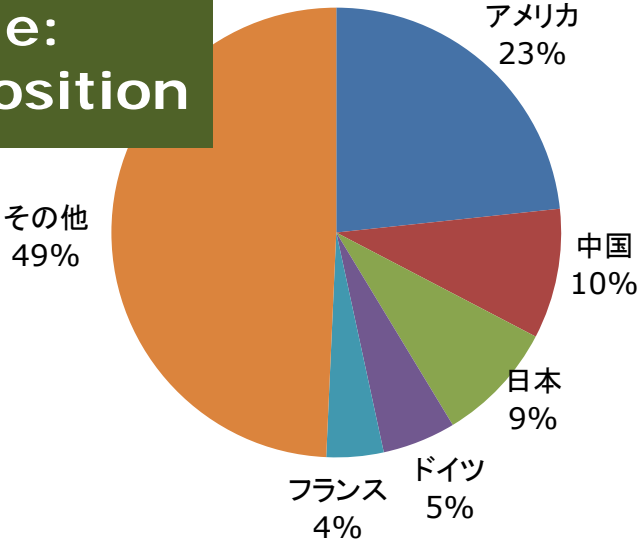
Source: UN Population Division (2010) World Population Prospects 2010

Per capita GDP: Japan 16th



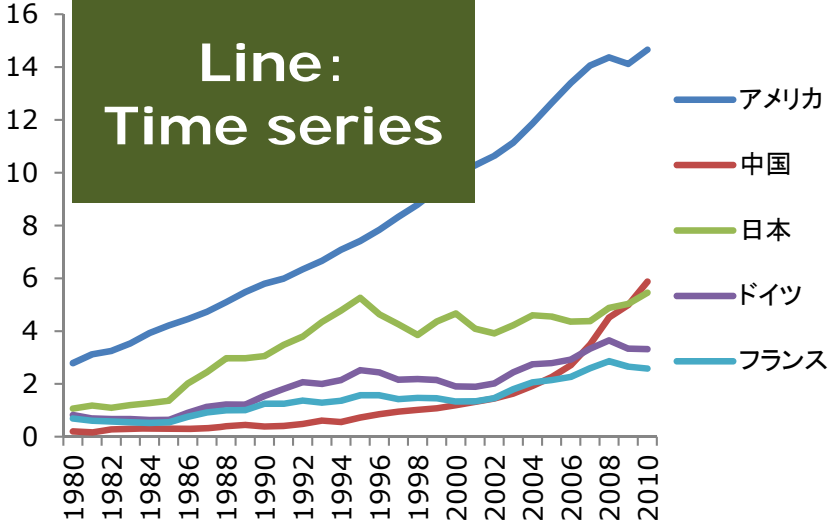
Graph type selection

**Pie:
Composition**

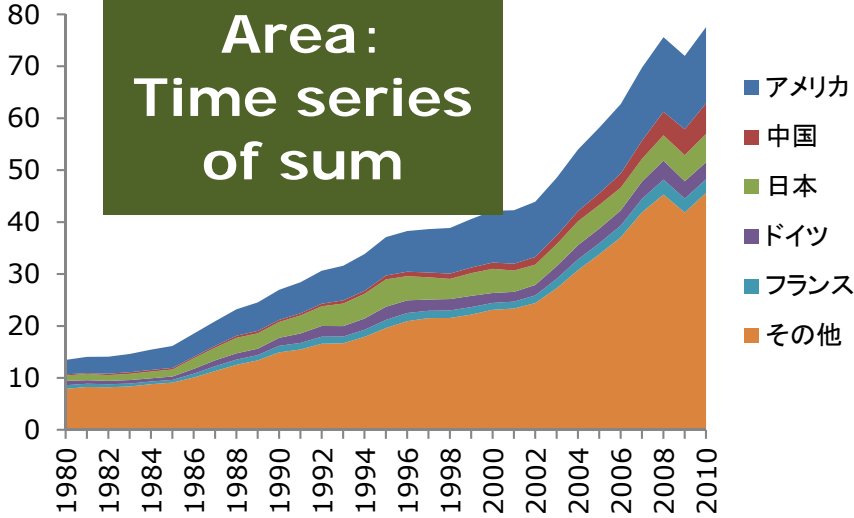


**Bar:
Comparison
of elements**

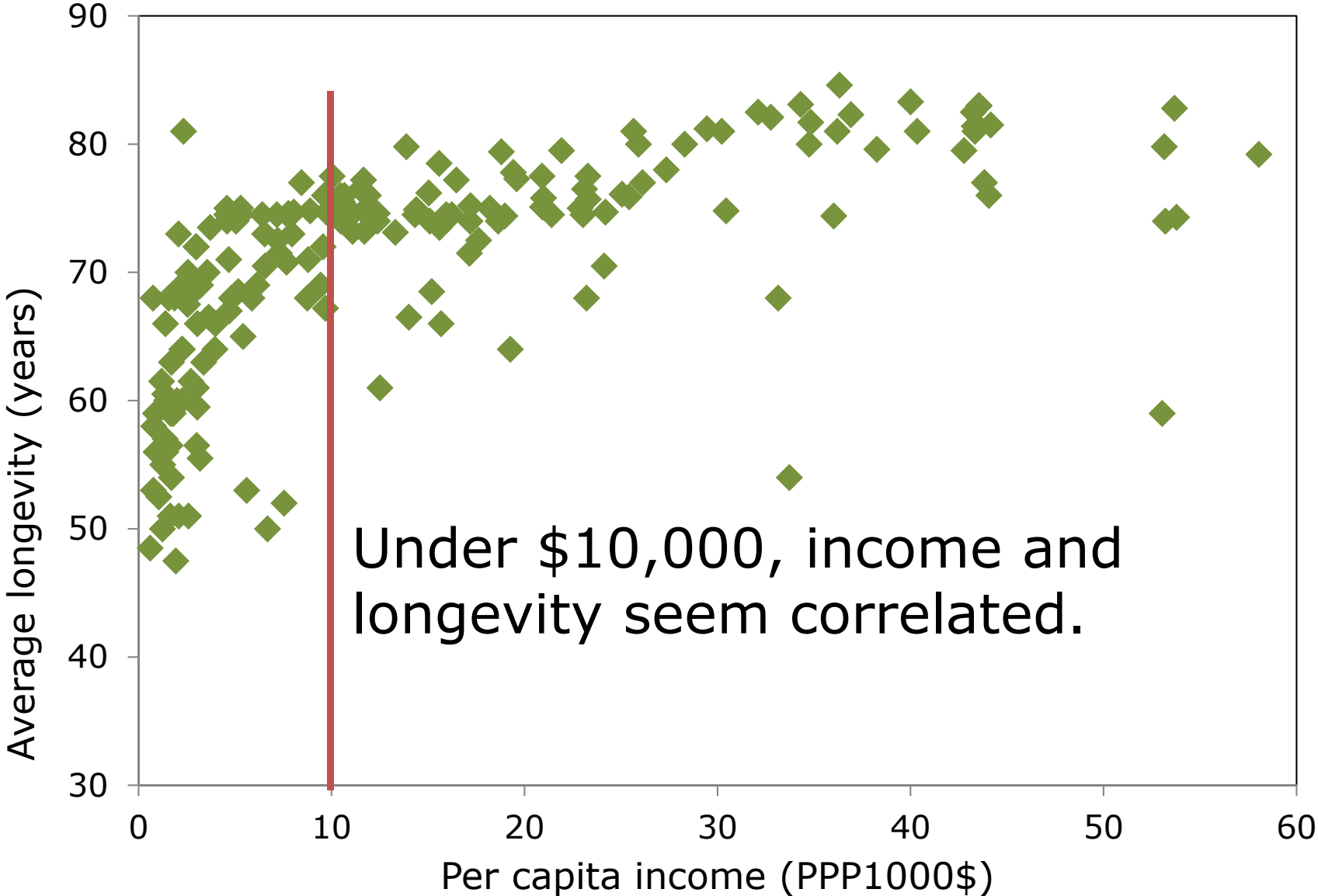
**Line:
Time series**



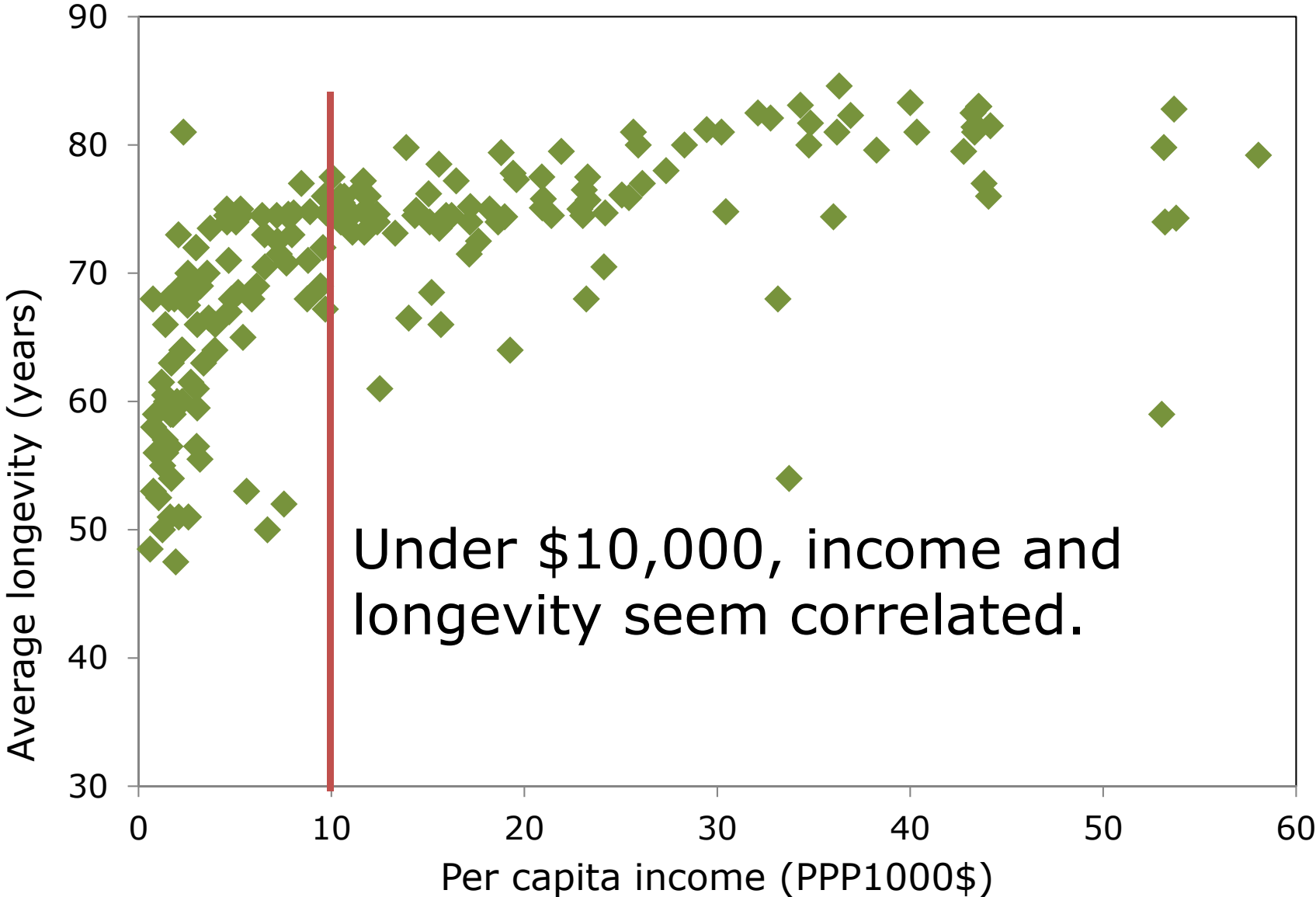
**Area:
Time series
of sum**



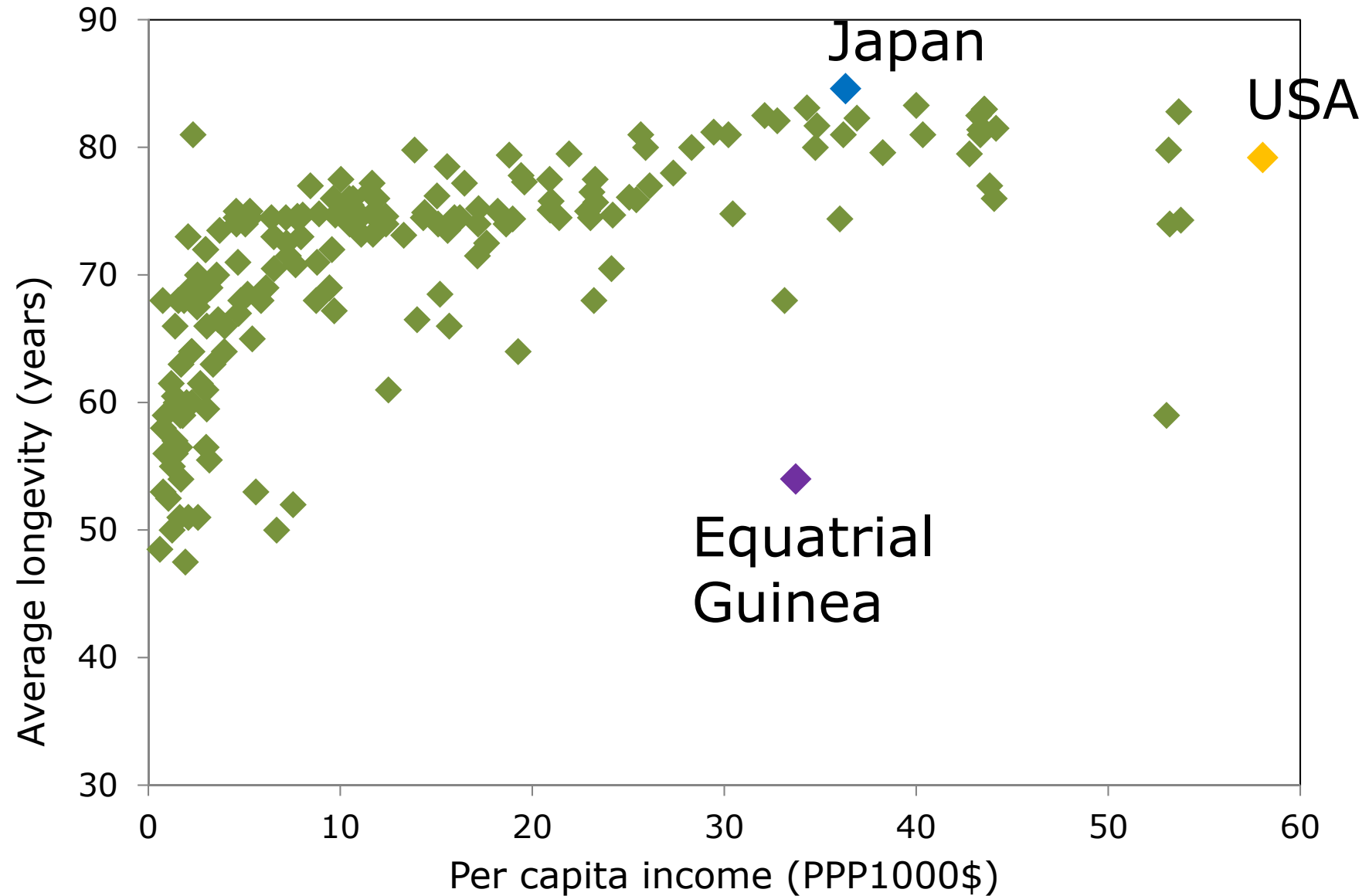
More income means longer life?



More income means longer life?



More income means longer life?



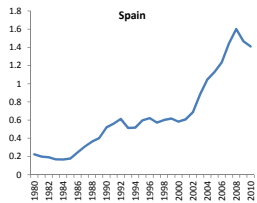
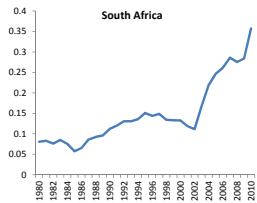
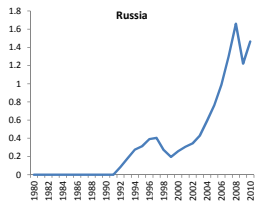
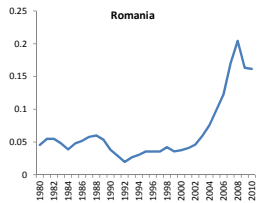
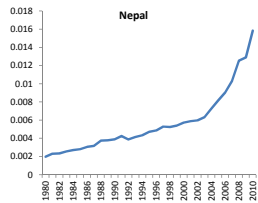
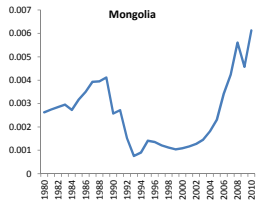
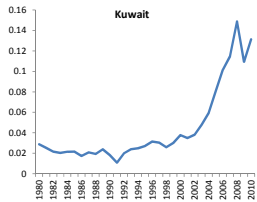
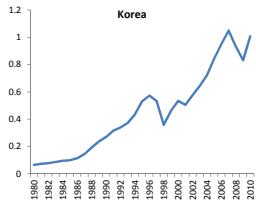
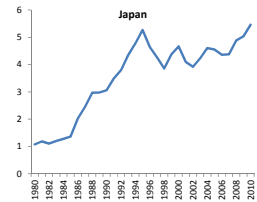
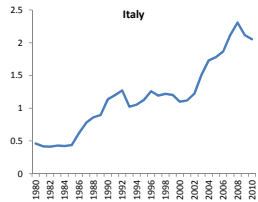
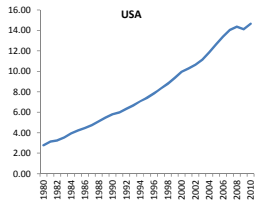
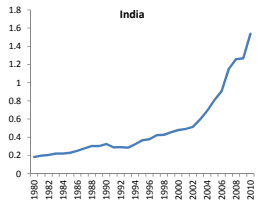
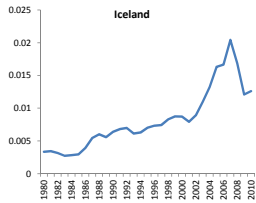
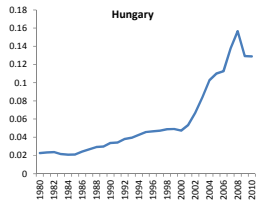
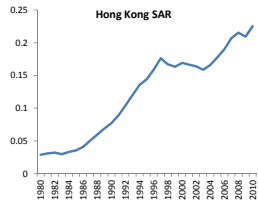
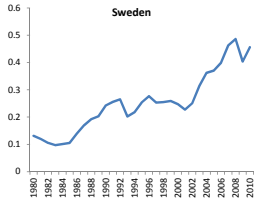
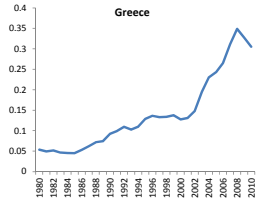
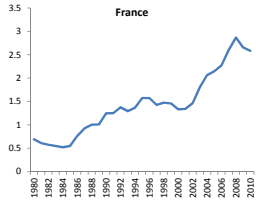
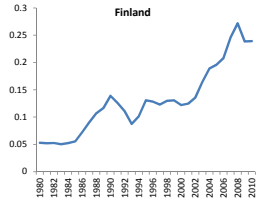
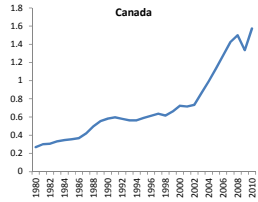
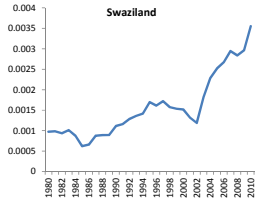
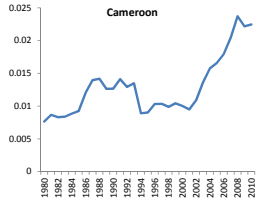
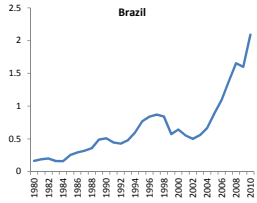
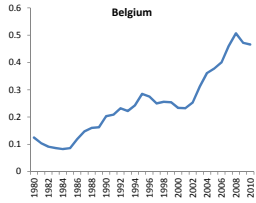
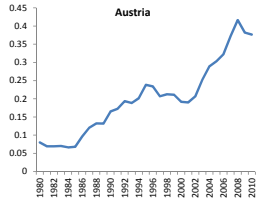
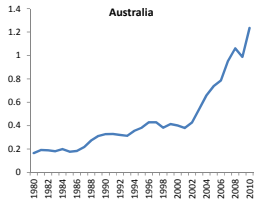
Best slide has Least information

- One moment, one thing
 - Add another slide if contents increased
 - Slide is not a book or hand-out
-

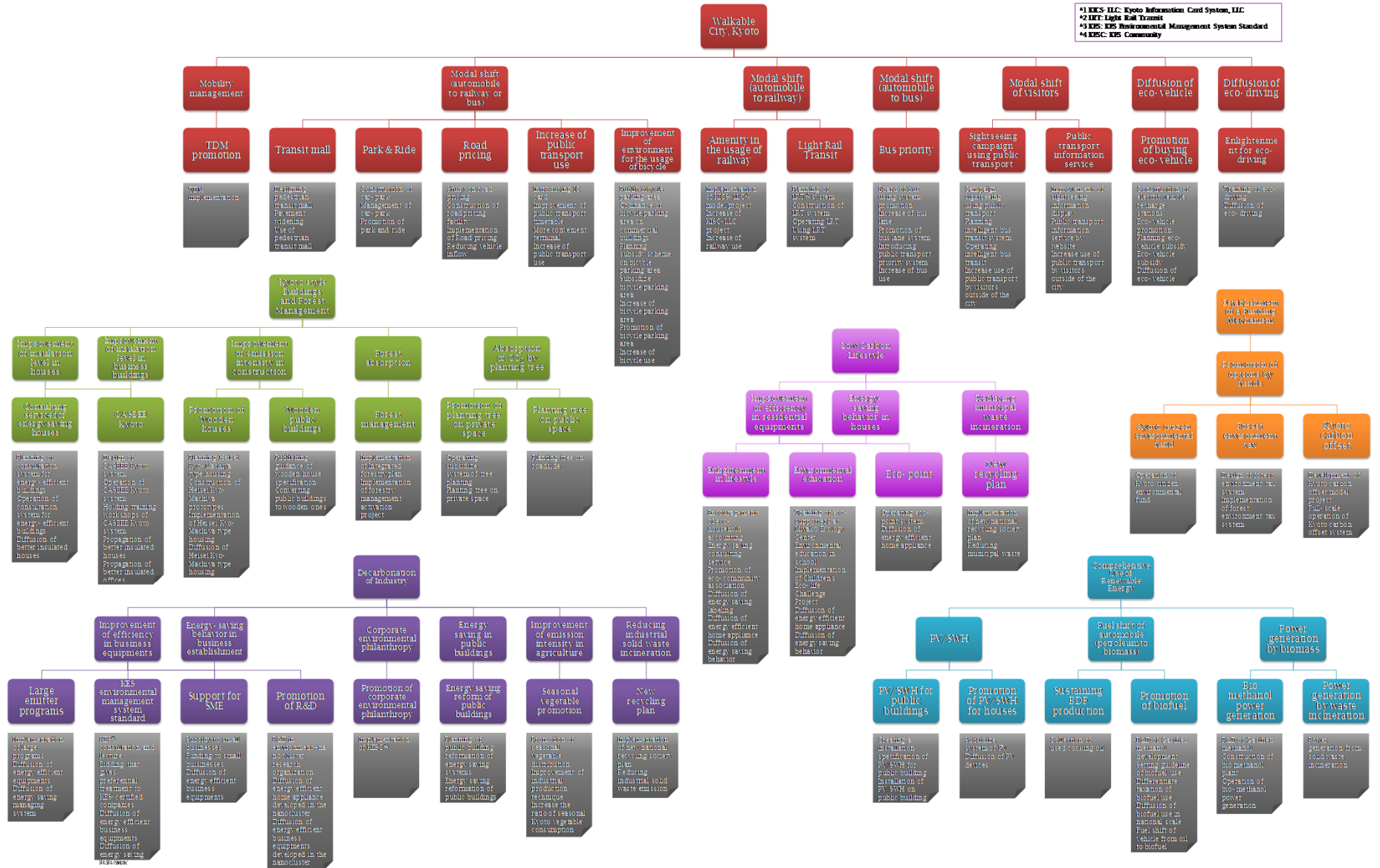
One moment, one thing

- Say one by one
 - Necessity to see multiple contents at the same time
 - Only one case when it is allowed...
-

What can you see?



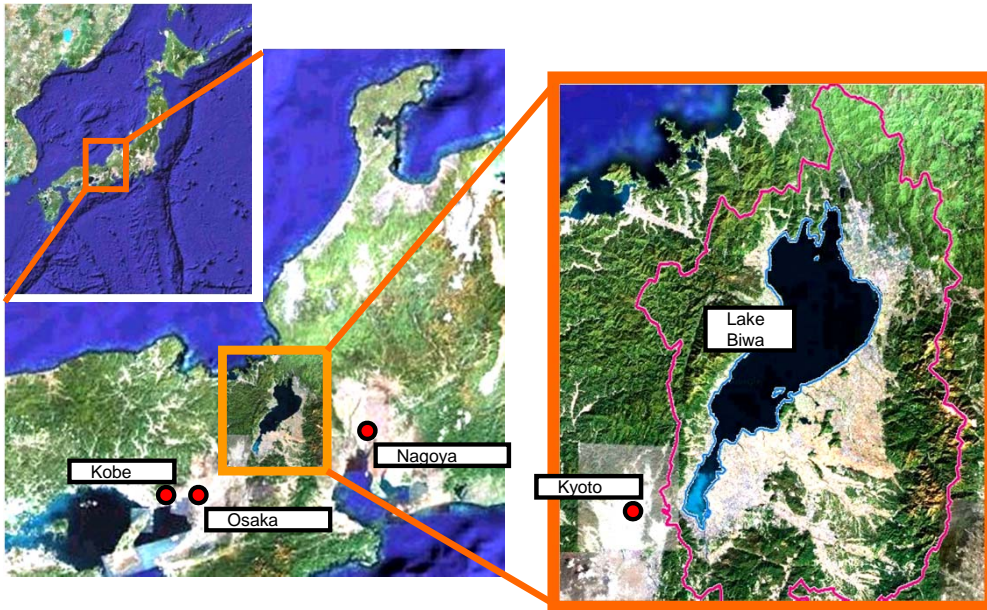
Low-carbon measures



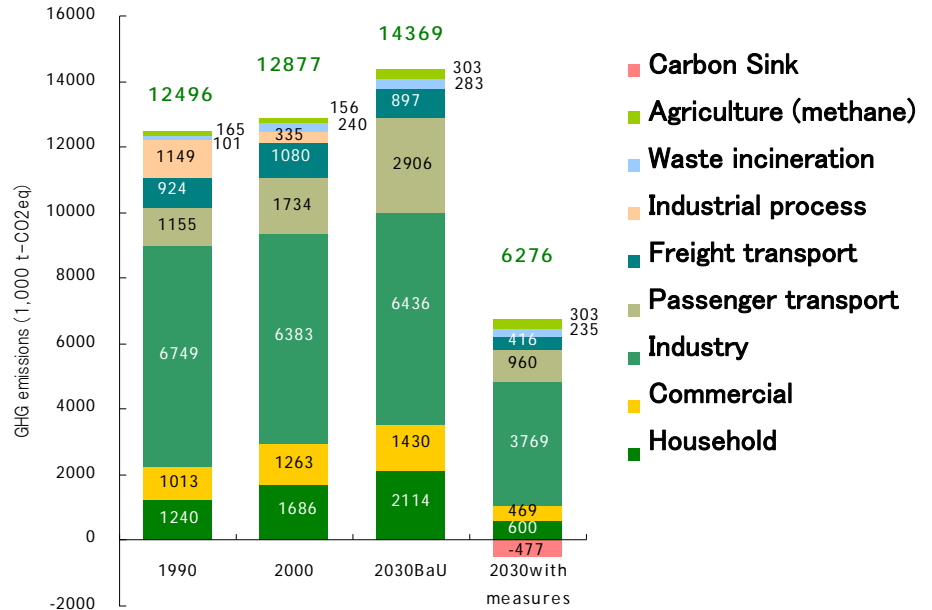
Add another slide!

- “You did a lot, anyway”
 - >3 contents \rightarrow Add another slide
 - Can not separate? Do structuring again.
-

GHG emission in Shiga pref.



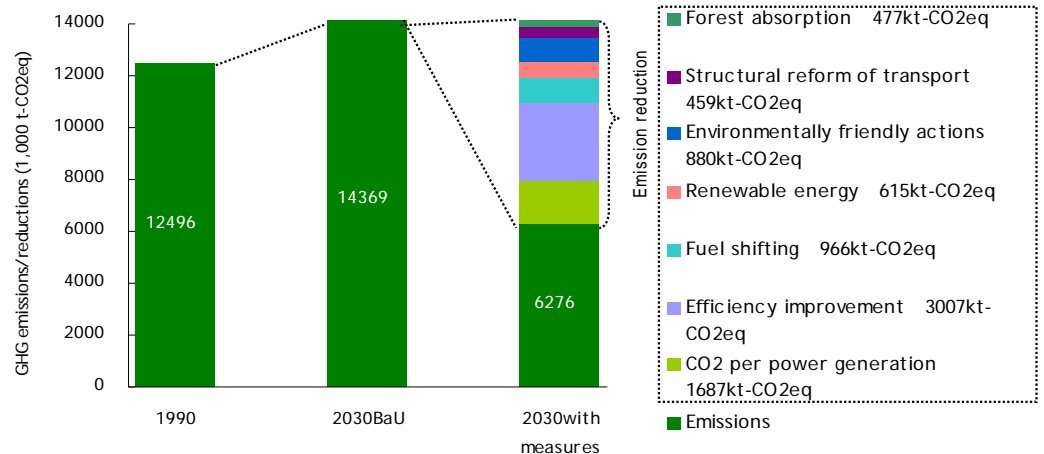
GHG emissions in Shiga pref.



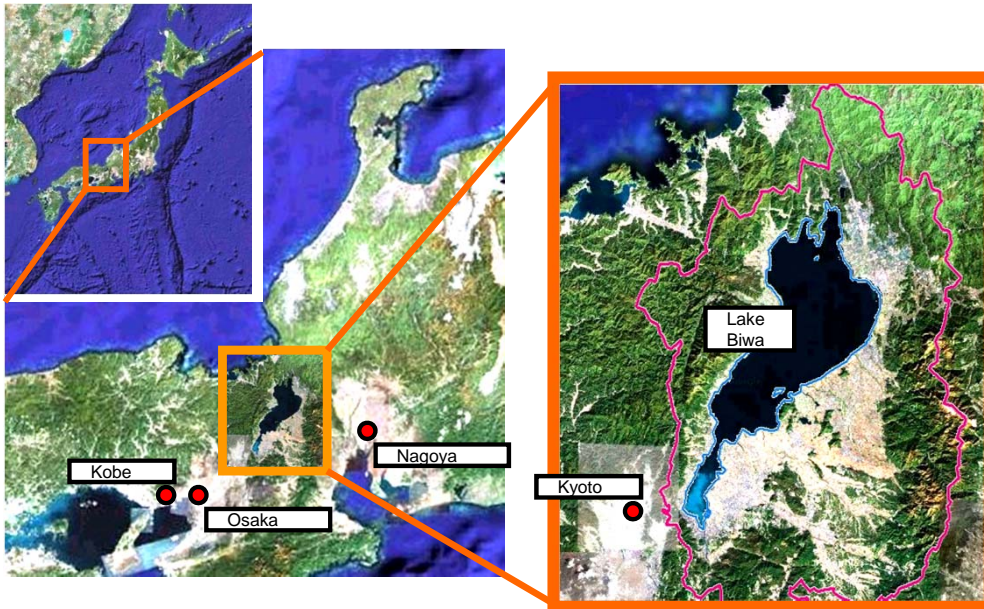
Socio-economic projections

	2005	2030 BaU	2030BaU/2005
Population (10 ³)	1397	1381	0.99
No. of households (10 ³)	439	521	1.19
GDP (bill yen)	5935	7677	1.29
GDP per capita (mill yen/capita)	4.25	5.56	1.31
Gross output (trill. yen)	12	13	1.16
Primary industry	95	564	5.91
Secondary industry	7220	6470	0.90
Tertiary industry	4269	6401	1.50
Commercial floor area (mill.m ²)	20	23	1.13
Passenger transport (mill p-km)	10670	16367	1.53
Freight transport (mill t-km)	3937	3397	0.86

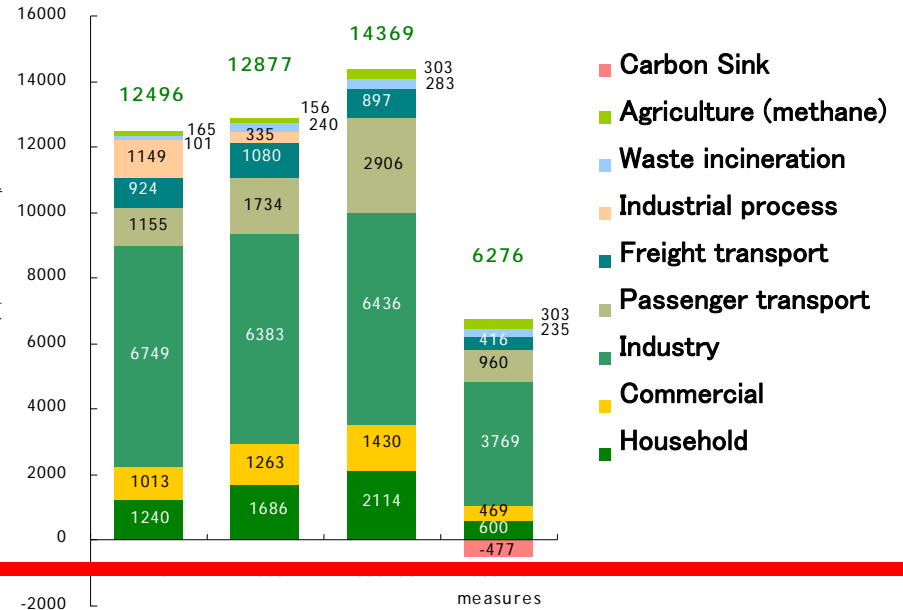
GHG emission reductions by measures



GHG emission in Shiga pref.



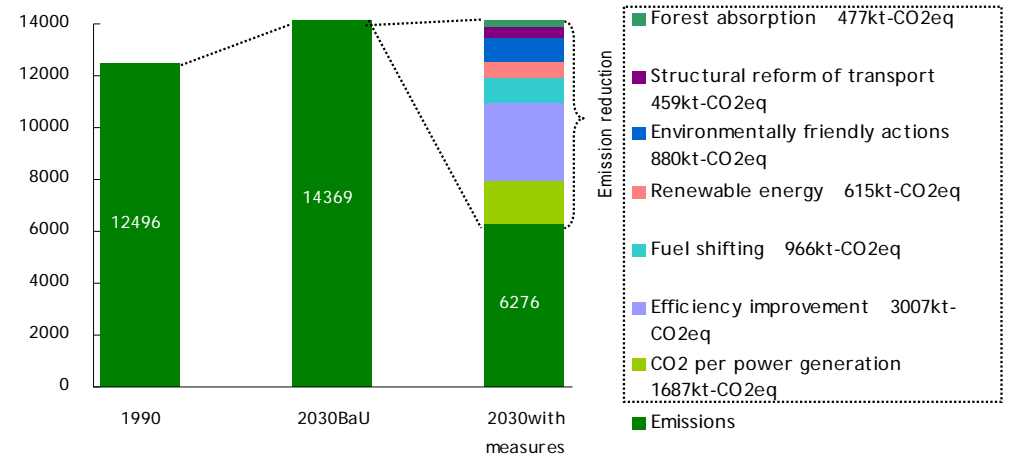
GHG emissions in Shiga pref.



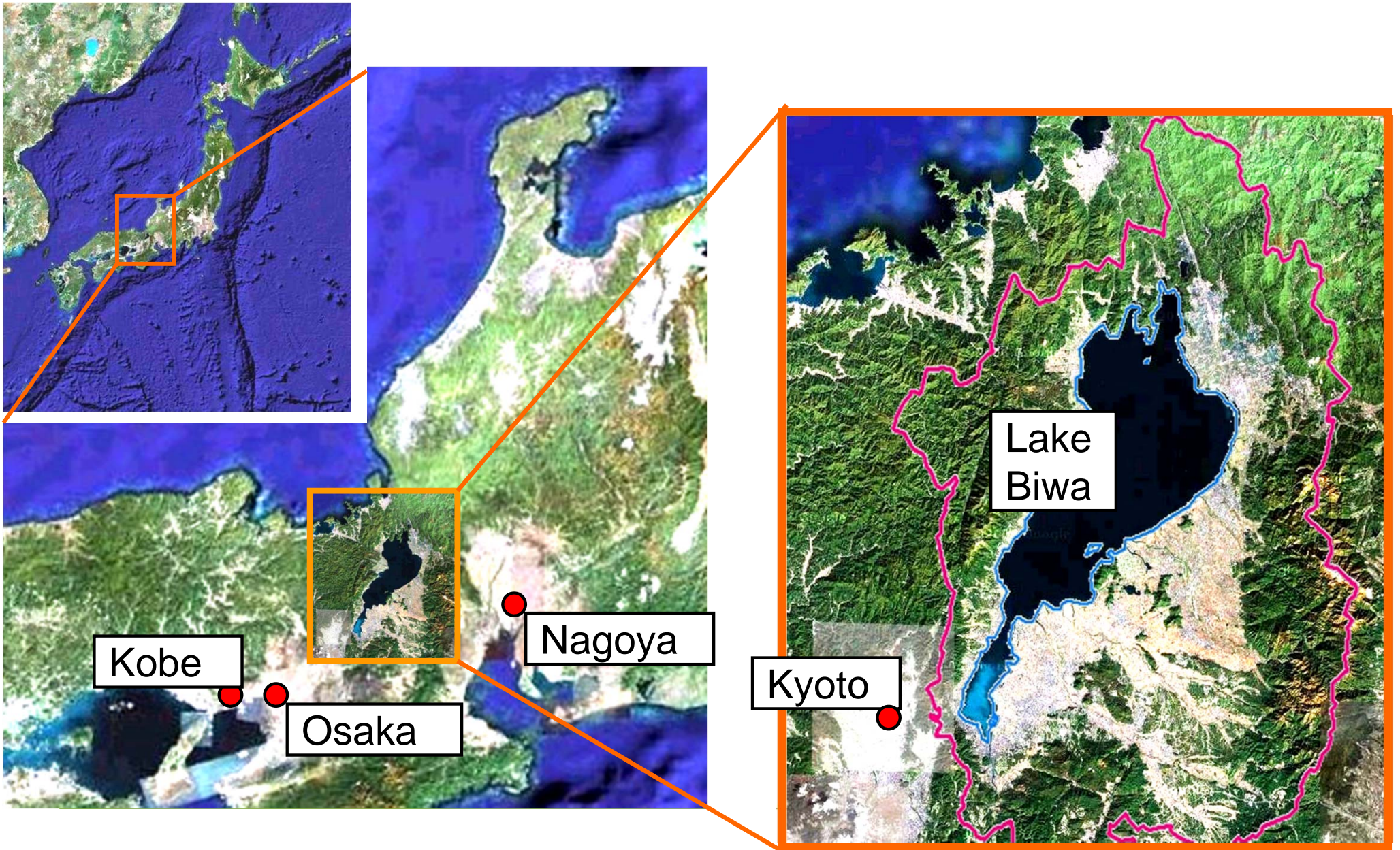
Socio-economic projections

	2005	2030 BaU	2030BaU/2005
Population (10 ³)	1397	1381	0.99
No. of households (10 ³)	439	521	1.19
GDP (bill yen)	5935	7677	1.29
GDP per capita (mill yen/capita)	4.25	5.56	1.31
Gross output (trill. yen)	12	13	1.16
Primary industry	95	564	5.91
Secondary industry	7220	6470	0.90
Tertiary industry	4269	6401	1.50
Commercial floor area (mill.m ²)	20	23	1.13
Passenger transport (mill p-km)	10670	16367	1.53
Freight transport (mill t-km)	3937	3397	0.86

GHG emission reductions by measures



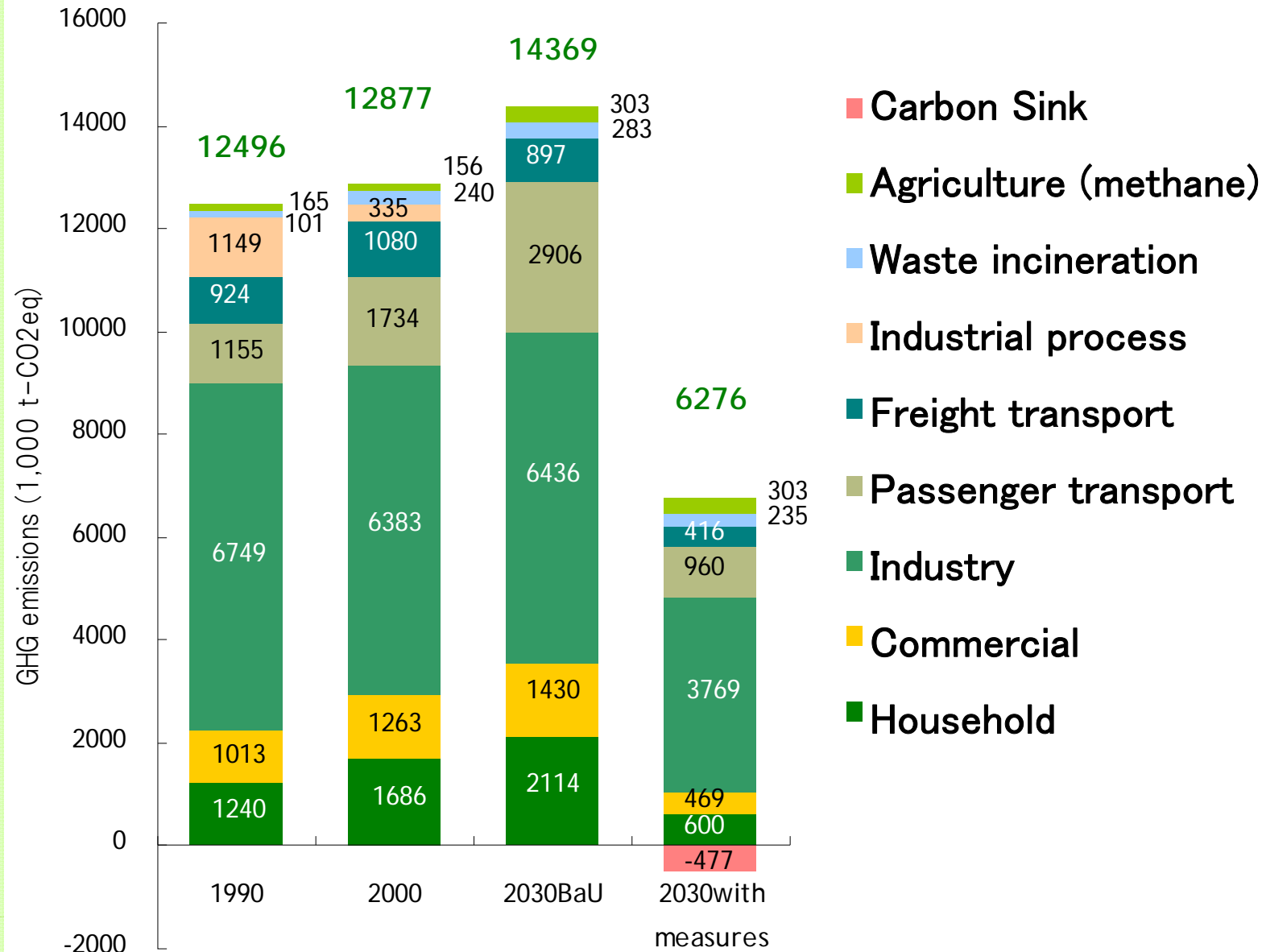
Shiga prefecture: Location



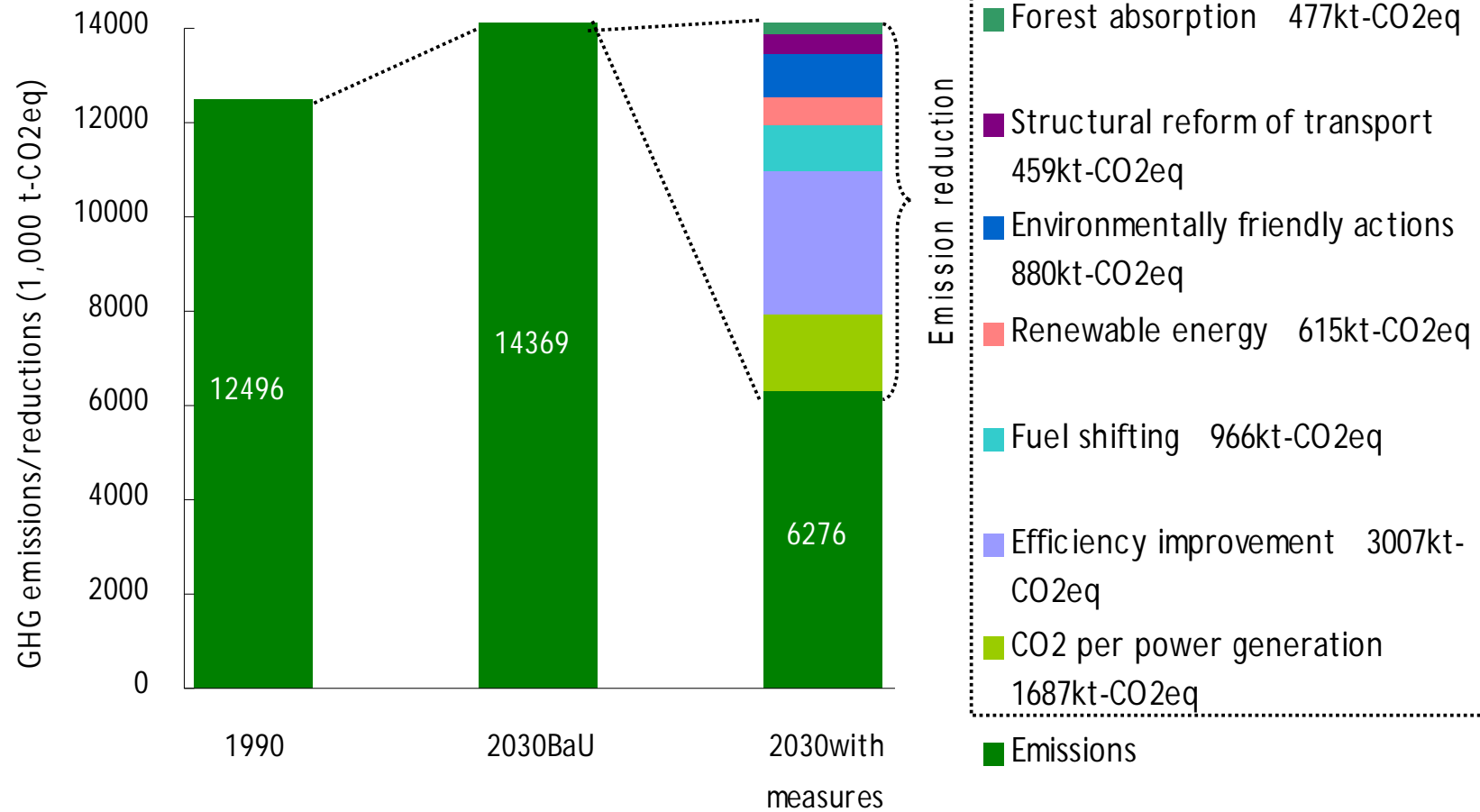
Socio-Economic Scenario

	2005	2030 BaU	2030BaU/ 2005
Population (10 ³)	1397	1381	0.99
No. of households (10 ³)	439	521	1.19
GDP (bill yen)	5935	7677	1.29
GDP per capita (mill yen/capita)	4.25	5.56	1.31
Gross output (trill. yen)	12	13	1.16
Primary industry	95	564	5.91
Secondary industry	7220	6470	0.90
Tertiary industry	4269	6401	1.50
Commercial floor area (mill.m ²)	20	23	1.13
Passenger transport (mill p-km)	10670	16367	1.53
Freight transport (mill t-km)	3937	3397	0.86

GHG Emissions in 2030



Emission reduction by measures



A slide is not a book

- ❑ No time to understand complicated contents
 - ❑ No time to read long sentence
 - ❑ Do not show data irrelevant to the storyline
-

Slide ≠ script!

- 非常に頻繁に見かけるスタイルですが、口頭で喋ることとほとんど同じ内容を文章でスライド中に書き込む発表者がいます。これは避けるべきです。書かれたことと同じことを話すのならばそもそも口頭発表を聞く必要がないからです。
- 新しいスライドが見せられたとき、聞き手はスライドに書かれたことを読み取ろうとします。そのような場合にこのように細かい字でびっしり書かれていると読むのに時間がかかるので全て理解しながら読むことが出来ません。そしてそればかりではなく、読むことに集中してしまっただ発表者の話を聞けなくなります。
- スライドに長い文を書くことで生じるもう一つの問題は、必然的に文字が小さくなってしまふということです。すぐあとの項目で説明するように、文字は聞き手が苦勞せずに読み取れる大きさでなければなりません。特に卒修論発表の会場に奥行きがあり、重要な聞き手である大学教員が会場後方に座っていた場合には小さな字でびっしりと書かれたスライドを読書するために非常に苦勞するでしょう。
- スライドに小さい字でびっしり文字を書くことがいかに困ったことであるかを示すために本資料のこのページは本来「ノート」欄に書くべきことをスライドに書き、ノート欄にスライドに書くであろう内容を書いています。このような口語調の文章であればまだよいのですが、アカデミック・プレゼンテーションでは漢字や専門用語を多用し常体で書かれた堅苦しい文章になるので読みづらさはなおさらです。
- というデメリットが非常に大きいのでスライドに台本を書くことは絶対に避けましょう。当研究室の発表練習でそれをやった場合には百発百中私に文句を言われます。

Slide \neq script!

- Silence is better
 - Audience will read, not hear
 - Fonts will be too small
-

Large fonts, clear colors

- Unreadable letters are worthless
 - Color is information, not decoration
 - “Understandable” >> “Beautiful”
-

Unreadable letters are worthless

- They do not read fonts <24pt
 - Revise to decrease words and letters!
-

Color is information, not decoration.

- Clear contrast

 - Bad

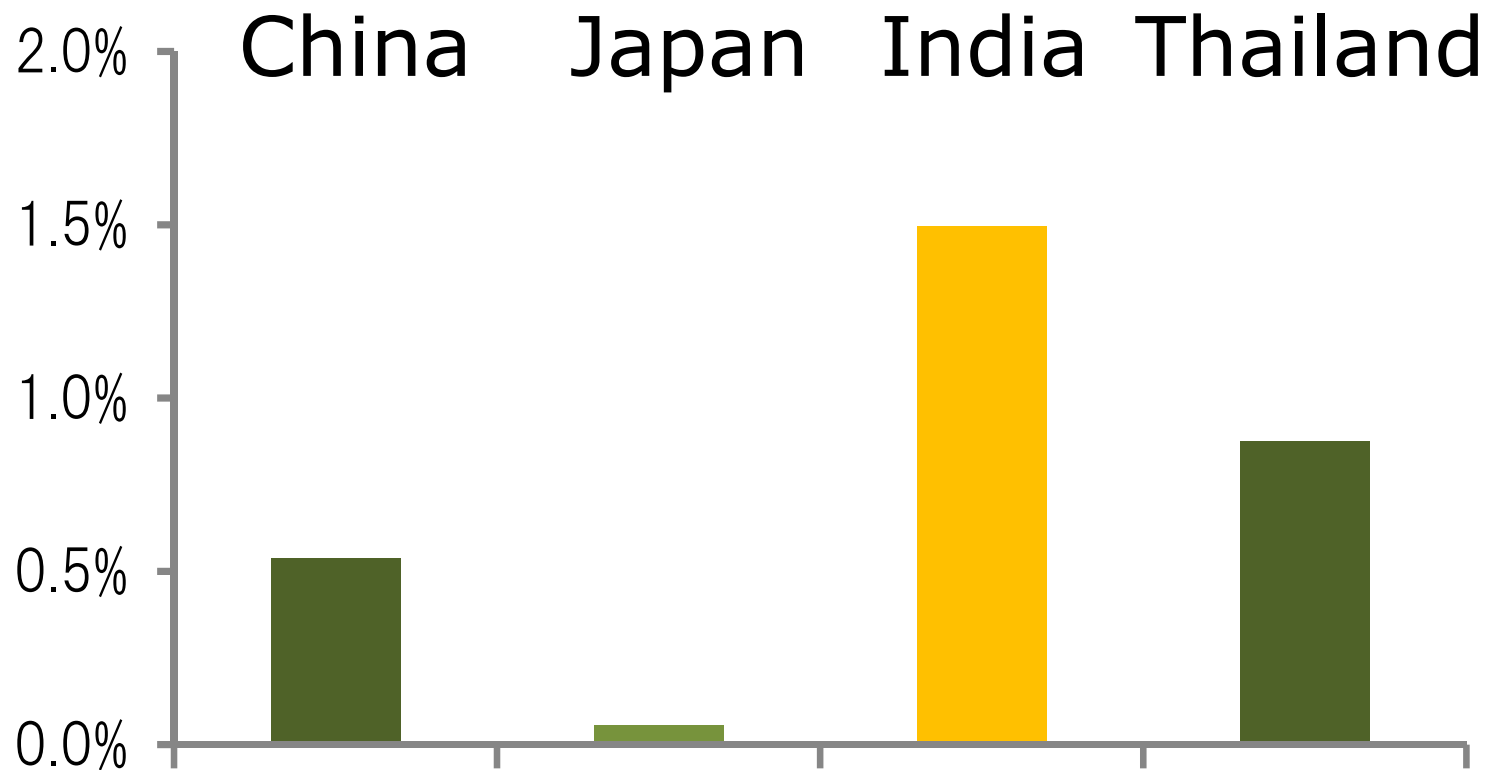
 - Good

- Consistent color choice

- Emphasize by color

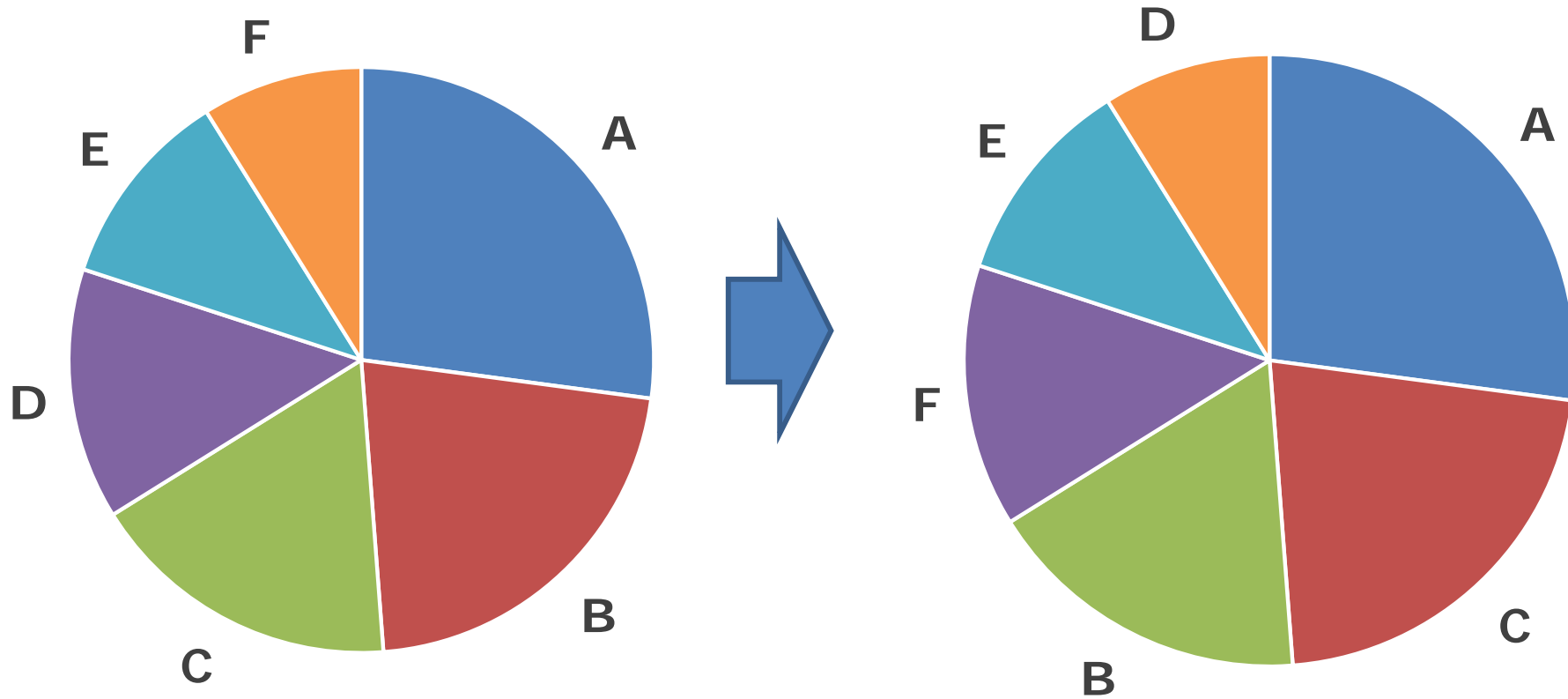
Emphasis by color

Average annual growth rate between 2001 to 2010



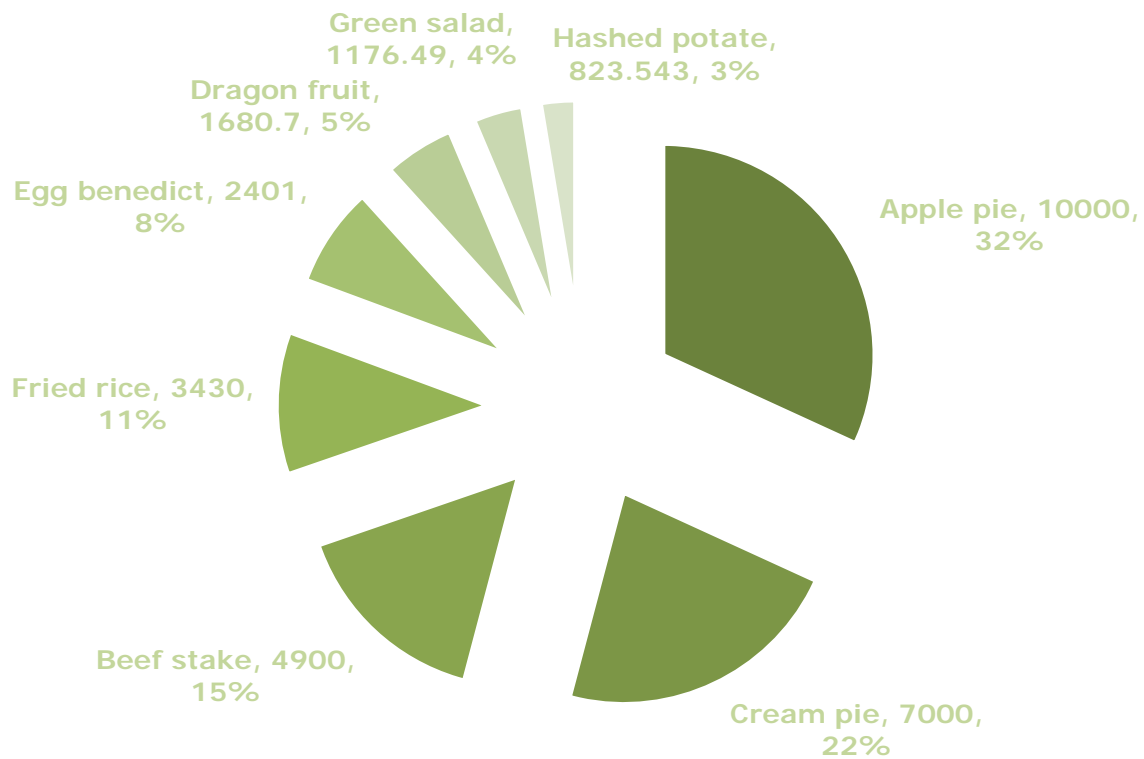
Source: UN Population Division (2010) World Population Prospects 2010

Consistent color choice



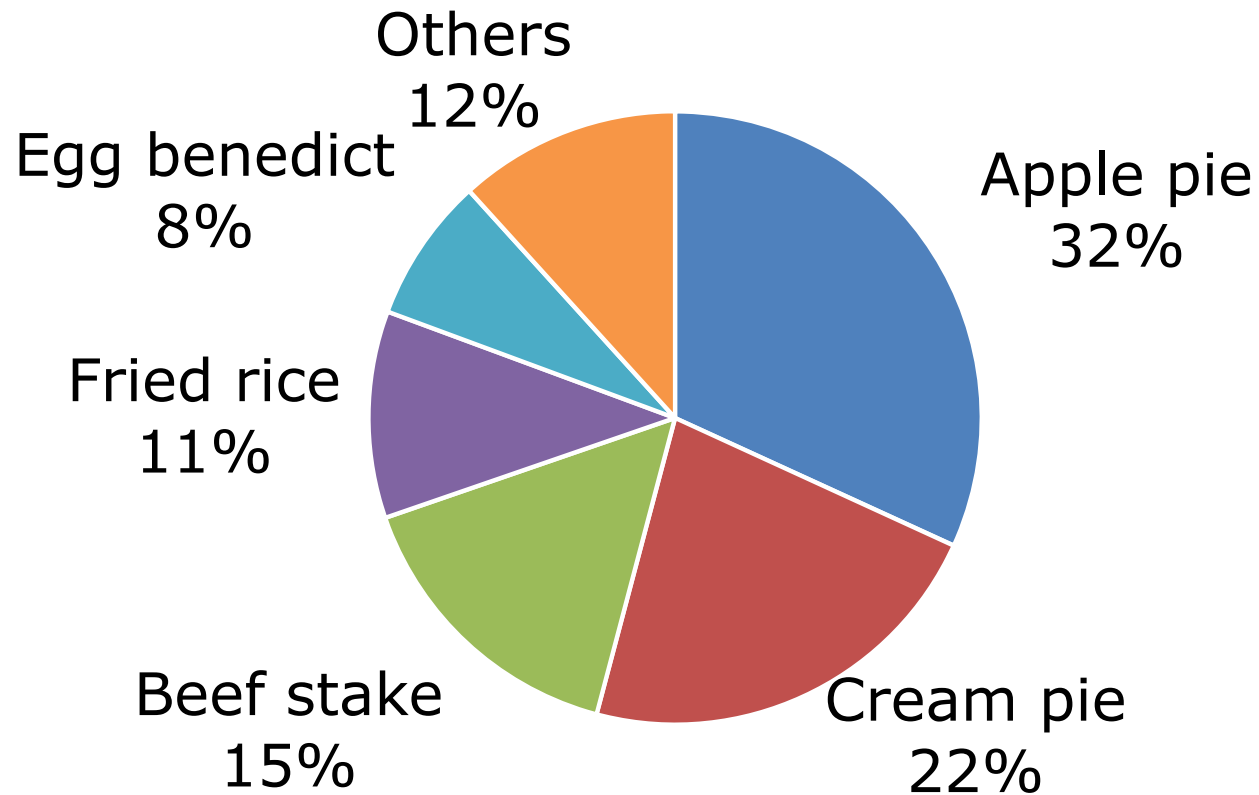
“Understandable” >> “Beautiful”

Preference of dinner menu : Marunouchi business person



“Understandable” >> “Beautiful”

Preference of dinner menu Marunouchi business person



Other points

- Especially for slide preparation...
 - Size of the venue
 - Can they show whole screen?
 - Page number, date
 - Version of software
 - “Thank you” slide is no thank you

 - General for academic reporting
 - Spelling, Consistent terminology, Unit, Source, Axis label , Appendix
-

Contents

About

1. What presentation is, and what it is not
2. No message, no value
3. Three fundamental rules of slides
4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

Rehearsal, rehearsal, and rehearsal!

- Show your face!
 - Speak slowly
 - Practice as many times as possible
-

Don't watch the screen. Show your face!

- Your body tells a lot.
 - Get feedback from the audience
 - Watch several guests
-

Speak slowly

- Exceeds the time? Revise your script!
 - As if the audience is XX years old
 - Emphasize:
 - Slow down, Pause, (Strong)
-

Practice as many times as possible

- Keep the time at any costs
 - Remind all scripts
 - Recording: To be your audience
-

Other techniques of speech

- Attention
 - Walking
 - Black/white out the screen

 - Ice break

 - Be honest in Q&A
-

Be honest in Q&A

- Answer what you are asked
 - Answer shortly
 - Prepare FAQ
-

Contents

About

1. What presentation is, and what it is not
2. No message, no value
3. Three fundamental rules of slides
4. Rehearsal, rehearsal, and rehearsal!

Be Optimistic on the stage

Be optimistic on the stage

- Good preparation gives you confidence
 - Practice hard, enjoy your stage
 - Enough sleep
 - It is no more than one presentation.
-