

Assessing Global Markets

Identifying international market opportunities

—by Fred L. Miller

Introduction

Microlending has become well established as a successful economic development strategy in emerging markets. The technique involves making relatively small, unsecured personal loans to low-income entrepreneurs to develop business models that benefit local communities. By providing products and services adapted to local markets, borrowers are able to establish profitable businesses on a relatively small scale, which they can then expand to larger opportunities.

In many cases, these programs target women who traditionally have lacked the educational, social, and economic opportunities of men. Those who achieve initial success face the challenge of managing the growth process for their expanding businesses. This requires a skill set of managerial, financial, and marketing capabilities that is difficult to acquire.

Personal Management Training, Inc. (PMT), is a producer of electronic management training systems for professionals wishing to enhance their managerial skills. The firm's newest product is MicroEntrepreneur, a computer-based system that integrates educational exercises with marketing and accounting software to facilitate market planning for client entrepreneurs.

The firm has developed a version of this system targeted to the needs of small-scale businesses in developing countries. The system is designed to operate on the small, durable, reliable, and inexpensive notebook systems that have been widely distributed in those countries. It wishes to offer this system to women who have been successful in microlending programs and desire to grow their enterprises to larger-scale operations.

Janice Stevens, the firm's CEO, has tasked you, PMT's marketing director, to screen the world's countries to identify the most attractive target countries for this product. Based on the nature of the product and its target customers, Janice wishes to target low- to middle-income countries with high percentages of women in the work force of whom a significant percentage are self-employed. Among target countries, those with the highest populations would be the most attractive initial markets. Janice also believes it would be beneficial to concentrate on a single geographic area of the world with common cultural characteristics if possible.

You will use web-based data visualization and spatial analysis tools to identify the countries that best match these target criteria.

Keywords: marketing; business GIS; business; global marketing; international marketing; international market assessment; market selection; country market evaluation

Location

The world and its countries

Time to complete the lab

60 to 90 minutes

Prerequisites

An understanding of the importance of international market assessment in the process of developing global marketing strategies

Access to Gapminder.org with a web browser

Data used in this lab

Demographic and socioeconomic data at the country level

Student activity

This lab focuses on the process of international market assessment. Specifically, you will use an online data analysis system to explore the distribution of key market characteristics and determine the countries that best match those sought in the target country profile for the MicroEntrepreneur product.

EXPLORE GLOBAL SOCIOECONOMIC PATTERNS

VISUALIZE

- 1 Load **Gapminder World** by pressing the *CTRL* key and clicking the text in red.

Your screen should resemble the one below. Note the rich information content that is provided on this screen. Each circle on the graph is a country whose geographic location is represented by the color scheme in the *Geographic regions* indicator box in the upper right corner of the screen.

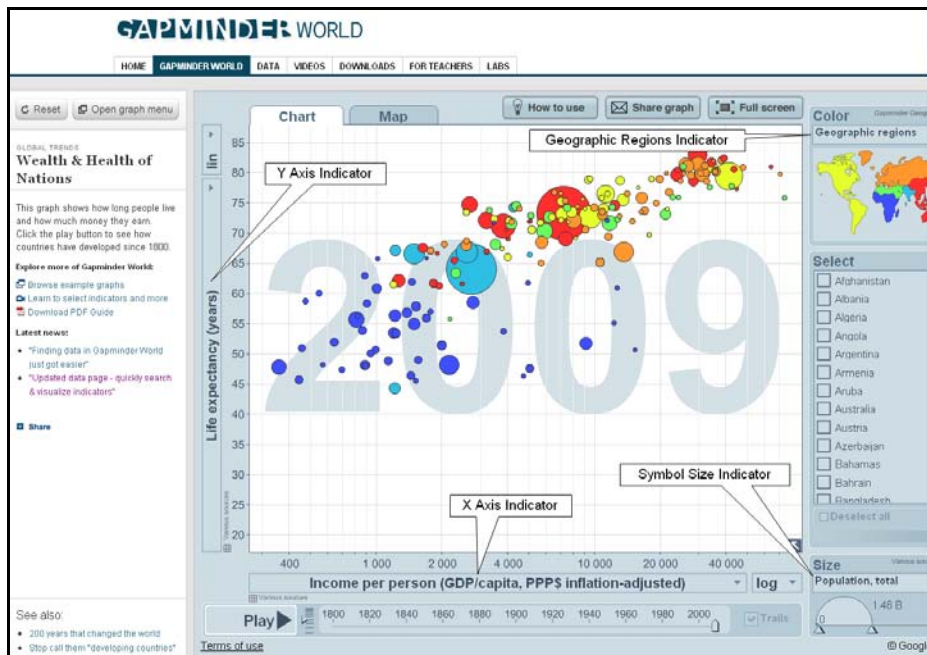


Figure 1: The Gapminder World data analysis system

The x-axis indicator represents income per person (adjusted for inflation and comparative price levels between countries), and the y-axis indicator represents average life expectancy. The positive relationship between these two socioeconomic measures is not surprising.

Note the *Size* indicator at the lower right of the screen. This setting indicates which indicator—in this case, population—is represented as the size of each circle.

- 2 Pause your mouse pointer on a circle to see the country it represents. Note that, as you do so, the country's values for each indicator and location are displayed in the appropriate locations. Thus, you can determine four distinct information items about each country simply by pointing to it. You can also compare these values to other countries in the world.

3 Click the *Play* button on the lower left.

The graph immediately changes to reflect the data for these indicators at the earliest date they are available. The graph for each successive year is displayed as the button moves across the scale bar at the bottom of the chart.

4 Click the *Stop* button. Note that the year of the data shown in the chart is displayed in the background.

5 Move the button along the date slider bar to display these measures for the year of your choice.

6 Move the date slider button to the left and click *Play* again to restart the time animation. Note the historical development of the three socioeconomic measures over time.

ANALYZE

As the MicroEntrepreneur product is targeted at women, you wish to explore patterns of female participation in the workplace over time between geographic regions and among select countries.

1 Click the y-axis symbol field and then select *Work » Labour force participation » Females aged 15-64 labour force participation rate (%)* (see graphic below) to select this indicator for the y-axis.

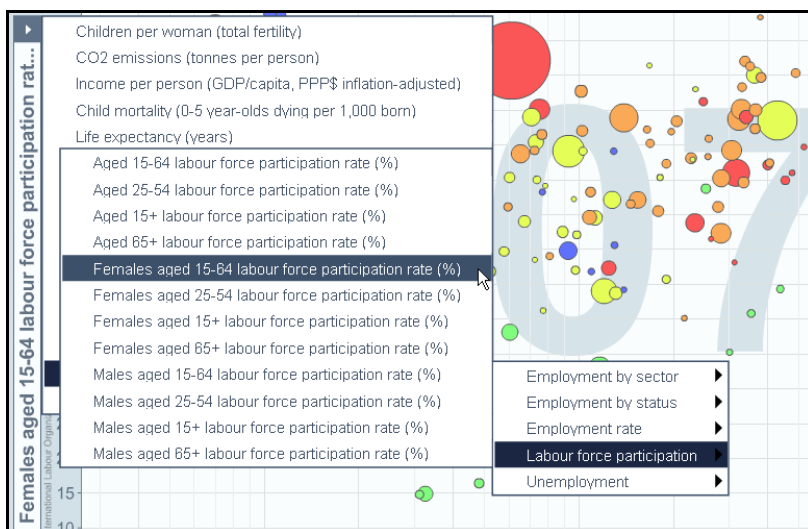


Figure 2: Changing the indicator for an axis

The graph immediately changes to reflect your selection. Examine the data for the most recent year. In this graph, data points are widely dispersed, reflecting a more complex relationship.

You wish to explore geographic differences in these measures.

- 2 In the *Geographic regions* box in the upper right corner of the graph, pause your mouse pointer on the Americas (in yellow). Note that the values for countries in this region are now blinking on the map.
- 3 Pause on other regions of the world. Examine the distribution of data for each region and use this information to answer the following question:

Question 1: *How does the relationship between these measures—working females, per capita income, and total population—differ among the world's geographic regions? What historical, cultural, and/or situational factors do these differences reflect?*

While this graph illustrates the current status of these indicators, you wish to analyze their development over time in key countries in each region.

- 4 Either by clicking their symbols in the map or checking their country names in the *Select* box, select China, Germany, India, Japan, Kenya, Saudi Arabia, and the United States.
- 5 Confirm that the *Trails* box just to the right of the time scale is checked and then click *Play* to view the measures for the selected countries over time.
- 6 Use the resultant graph, which should resemble the one below, to answer question 2.

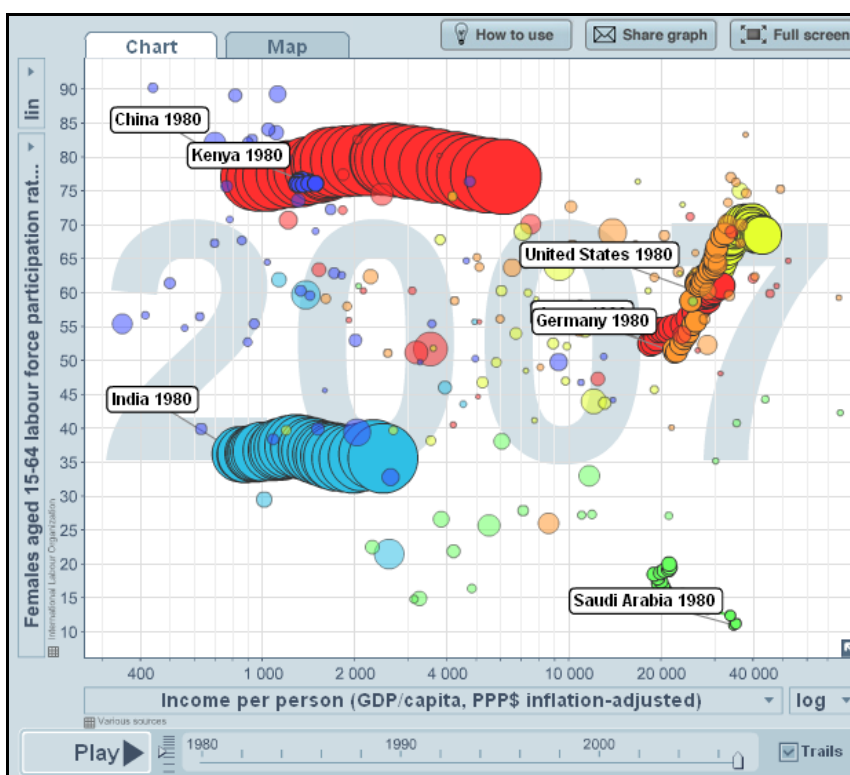


Figure 3: Viewing comparative country data over time

Question 2: How does the relationship between these measures—working females, per capita income, and total population—differ among the selected countries?

As you can see, this system is a very effective method for studying relationships between socioeconomic factors and the development of those relationships over time and across countries. However, the system's flexibility also allows analysts to customize it to their research objectives. You will use this capability to identify target countries for the MicroEntrepreneur product.

IDENTIFY TARGET COUNTRIES IN EACH GEOGRAPHIC REGION

Your research objective is to identify middle- to low-income countries with high levels of female work force participation and a significant percentage of working women who are self-employed. You will adjust the application settings to display these socioeconomic characteristics.

VISUALIZE

- 1 Click the *Deselect all* button at the bottom of the country list.
- 2 In the current map, the size of each symbol reflects country population.
- 3 At the right of the *Size* variable (currently displaying *Population, total*), click the drop-down arrow and then click *Indicators » Work » Employment by status » Female self-employed (% of female labour force)*, as illustrated below, to select this indicator to be displayed by the size of each symbol.

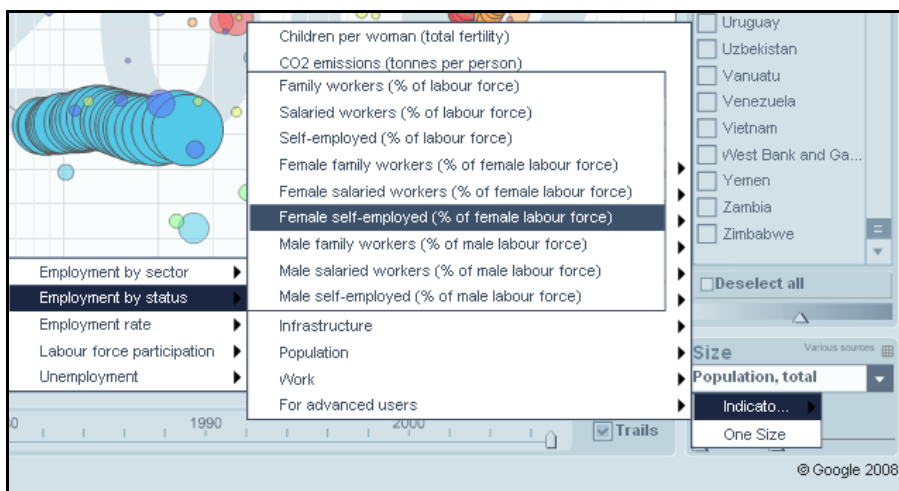


Figure 4: Changing the indicator for country symbol size

- Slide the bar on the time scale of the chart to display data for 2002, a year in which there is a substantial body of country data.

Your chart should resemble the one below:

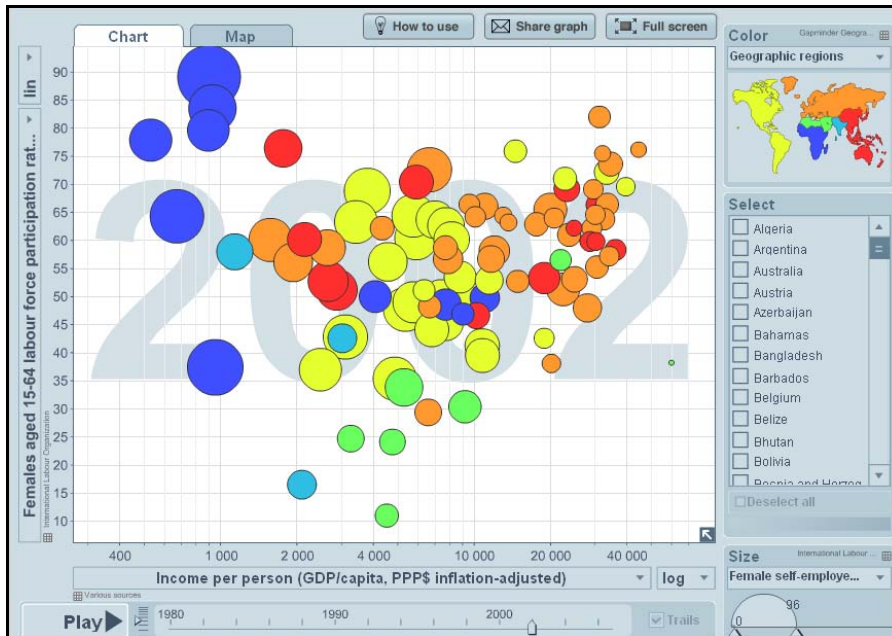


Figure 5: MicroEntrepreneur market screening chart

ANALYZE

When asked for specific measures of target customers, Janice stipulates that she wishes you to identify countries with inflation and price adjusted per capita income of \$8,000 or below, where female work force participation is 50 percent or above, and at least a third (33 percent) of working women are self-employed. You may use the current chart to identify these countries.

- Beginning at the upper left of the chart, pause your mouse pointer on each country with female labor force participation of 50 percent or above, adjusted per capita income of \$8,000 or less, and a *Size* value of 33 or more. Click each country that meets these criteria to highlight it on the map and select it in the country list. Note the values of each country for the three relevant measures. If they meet the requirements for target market countries, add them to the appropriate section of the table that follows. The number of rows in each region indicate the number of countries you should identify from the chart. Two regions, South Asia and Middle East and North Africa, have no countries that meet the screening criteria.

Country (millions of people)	Adjusted Per Capita Income	Female Work Force Participation	% Female Workers Self-Employed
America			
East Asia & Pacific			
Europe and Central Asia			
Sub-Saharan Africa			

PRIORITIZE TARGET COUNTRIES BY POPULATION

Among the target countries, the most populous ones represent the best country market opportunities. To make this determination, you will add population data to the table.

- 1 With the procedure you used previously, reset the *Size* setting to reflect each country's population. (In the *Size* box, click *Indicator » Population » Population, total*).
- 2 Pause on each of the selected countries to view its population. Record these values in your data table.

Use the information from the data table to answer these questions:

Question 3: *If this firm chooses to market in three individual countries, which ones do you recommend? Why?*

Recall that, if possible, Janice would like to concentrate in a geographic region with common cultural characteristics.

Question 4: *If this firm chooses to market in all the target countries in one geographic region with common cultural characteristics, which region do you recommend? Why?*

Question 5: *Which of these two options—individual countries or geographic region—do you recommend? Why?*

Submit your work

Prepare and submit a brief written report with the answers to these questions from the lab.

Question 1: *How does the relationship between these measures—working females, per capita income, and total population—differ among the world's geographic regions? What historical, cultural, and/or situational factors do these differences reflect?*

Question 2: *How does the relationship between these measures—working females, per capita income, and total population—differ among the selected countries?*

Question 3: *If this firm chooses to market in three individual countries, which ones do you recommend? Why?*

Question 4: *If this firm chooses to market in all the target countries in one geographic region with common cultural characteristics, which region do you recommend? Why?*

Question 5: *Which of these two options—individual countries or geographic region—do you recommend? Why?*

Credits

Application and data

This activity uses the Gapminder World web application and data (source: free material from <http://www.gapminder.org>).

Instructor resources

Answers to questions

Question 1: *How does the relationship between these measures—working females, per capita income, and total population—differ among the world's geographic regions? What historical, cultural, and/or situational factors do these differences reflect?*

Student observations may include the following: The America, East Asia & Pacific, and Europe and Central Asia regions display a wide range of income values and moderate to high levels of female participation, reflecting the range of economic development and cultural patterns in these regions. The Middle East and North Africa region displays relatively high income levels and low levels of female participation, probably resulting from the presence of oil revenues and the influence of Islam, respectively, in this region. South Asia's lower incomes and relatively low levels of female participation reflect the influence of Islam and less oil revenue. Sub-Saharan Africa's generally high levels of female participation and low incomes reflect economic conditions in this region, where many women work from necessity.

Question 2: *How does the relationship between these measures—working females, per capita income, and total population—differ among the selected countries?*

The level of female participation has been stable at high levels in Kenya, China, and India. Of these countries, Kenya has displayed little income growth, India substantial growth, and China very substantial growth. Per capita income has fallen slightly in Saudi Arabia, while the female participation rate has doubled. However, it is still quite low in comparative terms. Germany, Japan, and the United States all display moderate growth in inflation and price-adjusted income but substantial growth in female participation.

The graph suggests that the female market focus for the MicroEntrepreneur product is well advised.

Country (millions of people)	Adjusted Per Capita Income	Female Work Force Participation	% Female Workers Self-Employed
America			
Bolivia (5)	\$3,413	63%	39%
Paraguay (6)	\$3,784	69%	45%
Colombia (41)	\$5,755	64%	39%
Peru (27)	\$5,909	60%	40%
East Asia & Pacific			
Philippines (83)	\$2,651	53%	34%
Indonesia (211)	\$2,874	51%	35%
Europe and Central Asia			
Kyrgyz Republic (5)	\$1,574	60%	40%
Kazakhstan (15)	\$6,667	73%	42%
Sub-Saharan Africa			
Uganda (25)	\$928	84%	49%
Madagascar (16)	\$895	80%	36%
Ethiopia (68)	\$530	78%	38%
Tanzania (35)	\$899	89%	89%
Zimbabwe (12)	\$672	64%	63%

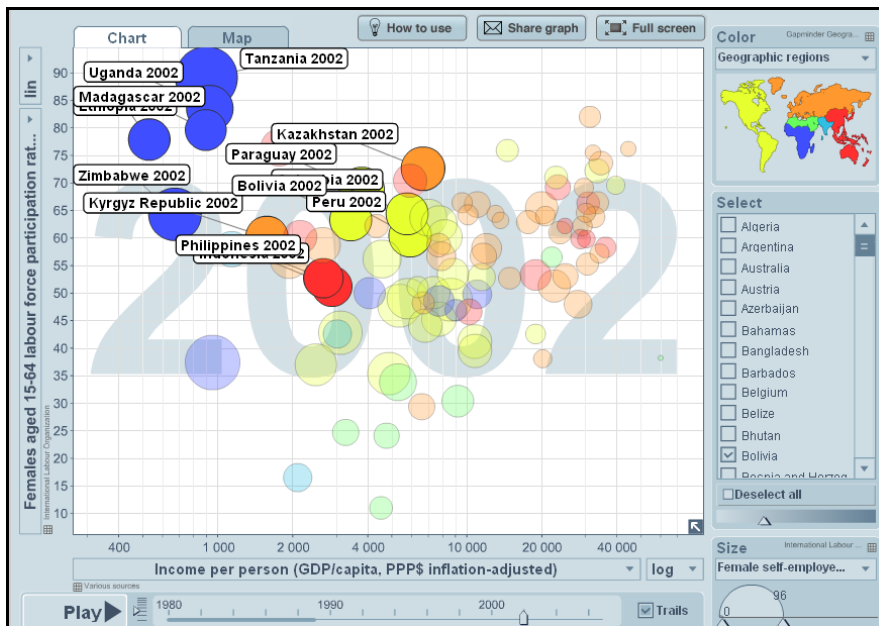


Figure 6: Chart for instructor reference (Source: Free material from www.gapminder.org)

This version of the chart is available for your review at <http://www.bit.ly/rinLsZ>.

Question 3: If this firm chooses to market in three individual countries, which ones do you recommend? Why?

Based on the specified selection criteria, the three most attractive countries overall are Indonesia, the Philippines, and Ethiopia. They are by far the three most populous countries and all have high levels of female participation and self-employment.

Question 4: If this firm chooses to market in all the target countries in one geographic region with common cultural characteristics, which region do you recommend? Why?

The East Asia & Pacific region and the Sub-Saharan Africa region offer the largest concentrations of population. However, the countries within them are diverse culturally and linguistically. Though offering a smaller total population, the America region countries are more similar in history, language, and culture than the two larger regions.

Question 5: Which of these two options—individual countries or geographic region—do you recommend? Why?

Students opting for the individual country option should cite the size and favorable characteristics of the three countries. Those opting for the regional option should cite the substantial, though relatively smaller, population of this region as well as the shared cultural patterns of these countries. The most thorough researchers may also note that several other countries in this region fall just short of the selection criteria, thus improving the region's attractiveness.

Additional discussion questions

1. Ask students to reduce the benchmark for female labor force participation from 50 percent to 45 percent and assess the impact on the list of target countries. Several other countries in the America region would be added with this adjustment, perhaps altering the recommended strategy.
2. PMT's other training products are designed for technical professionals in large global organizations who have assumed managerial responsibilities. Many of these systems offer online instruction. If you were tasked with setting country screening criteria for these products, how would your selection of indicators vary? Which ones might you use? Use this question to explore the range of over 450 indicators that are accessible in the Gapminder World system.
3. Though this lab asks for a recommendation as a closure to the exercise, the techniques here are more appropriate for initial screening of country options rather than making a final decision. For this reason, students may justifiably feel that they are being asked to make a recommendation with insufficient information. Invite them to specify the additional information they want, how it would affect the decision, and where they would go to find it.

Additional learning activities

1. Other data services listed in the references below provide international socioeconomic data as well. Compare the data and user interfaces in any two of these systems. Which do you believe to be the better tool? Why?
2. Use the *CIA World Factbook* in the references section to conduct additional research on the countries you recommend. How does this new information affect your recommendation?

Business GIS references

Central Intelligence Agency. *The World Factbook*.

<https://www.cia.gov/library/publications/the-world-factbook/index.html>

GlobalEdge data system, supported by Michigan State University Center for International Business Education and Research.

<http://globaledge.msu.edu/>

Murad, Abdulkader. 2009. "Using Customers Data for Defining Retail Market Size: A GIS approach." *International Journal of Business Information Systems* 4:3, 340–359.

Miller, Fred L. 2007. *GIS Tutorial for Marketing*. Esri Press: Redlands, CA.

Note: The PMD Global chapter covers international market assessment.

NationMaster.com—International Data Resource.

<http://www.nationmaster.com/index.php>

Romeo, J. 2005. "Target Marketing with GIS." *Geospatial Solutions*, May, 2–5.