By John G. Rodwan, Jr.

Challenging Circumstances Persist: Future Growth Anticipated U.S. and International Developments and Statistics s recently as the mid-2000s, the U.S. bottled water industry

looked like a highly unusual beverage industry marvel: A category that had achieved significant scale yet continued to register forceful growth. Indeed, for a while that's exactly what it was, with both volume and sales continuing to enlarge at double-digit percentage rates—or at rates close to those heady levels—even after bottled water became the second-largest beverage type, as measured in total volume, in the country.

If vigorous growth (until very recently) distinguished bottled water from the rest of the liquid refreshment beverage marketplace, then its performance lately made it look rather typical. As a group, the various beverages vying with bottled water for consumers' attention declined for the second time too in 2009. Carbonated soft drinks (CSDs), the sole category with greater volume than bottled water, extended its multi-year streak of contraction. Sports beverages, like bottled water, had successfully traded on the ability to hydrate and for many years enjoyed muscular volume growth, suffered a far more substantial retrenchment, with volume falling by 12.5 percent during the year. In contrast, bottled water's rate of reduction was much slower; it was also less pronounced than the setbacks experienced by fruit beverages or ready-to-drink coffee.

Indeed, bottled water shrank by less than the liquid refreshment beverage marketplace as a whole in 2009, allowing bottled water to again augment its share of Americans' beverage diet—if only slightly.

BOTTLED WATER AND SOFT DRINKS

The impact of the economic downturn on the bottled water business—and the beverage market as a whole—at the end of the 2000s punctuated a period of considerable changes in consumer preferences. At the beginning of the decade, CSDs accounted for nearly 28 percent of total liquid consumption by U.S. consumers. Then, Americans drank more than 15 billion gallons of CSDs, compared with 4.7 billion gallons of bottled water, which represented less than 9 percent of total beverage consumption and placed bottled water as the number five beverage category behind beer, coffee, and milk as well as CSDs.

By 2009, CSD volume had slipped to less than 14 billion gallons, while bottled water's stood at almost 8.5 billion gallons. Consequently, CSDs' market share had eroded to less than 24 percent, while water's had neared 14.5 percent. In terms of liquid refreshment beverages exclusively, bottled water accounted for more than 29 percent of total volume in 2009, up two-tenths of a percentage point from the year before.

U.S. BOTTLED WATER MARKET Volume and Producer Revenues 2001 – 2009					
Year	Millions of Gallons	Annual % Change	Millions of Dollars	Annual % Change	
2001	5,185.3		\$6,880.6		
2002	5,795.6	11.8%	\$7,901.4	14.8%	
2003	6,269.8	8.2%	\$8,526.4	7.9%	
2004	6,806.7	8.6%	\$9,169.5	7.5%	
2005	7,538.9	10.8%	\$10,007.4	9.1%	
2006	8,255.0	9.5%	\$10,857.8	8.5%	
2007	8,757.6	6.1%	\$11,551.5	6.4%	
2008	8,669.3	-1.0%	\$11,178.5	-3.2%	
2009	8,454.0	-2.5%	\$10,595.0	-5.2%	
Source: Beverage Marketing Corporation					

Prior to the U.S. recession and the attendant industry downturn, rapid volume growth characterized bottled water for much of this period, as reported in the latest edition of Bottled Water in the U.S., Beverage Marketing Corporation's annually published analysis of the market. Bottled water volume achieved double-digit percentage growth rates in two years and advanced at rates close to that level in several others. After growing by 10.8 percent in 2005, for instance, bottled water volume enlarged by 9.5 percent in the following year. CSDs, in pronounced contrast, followed several years of slow growth with multiple volume reductions. Indeed, the category underwent its fifth year in a row of volume reduction in 2009.

However, in a significant turnabout from earlier years, bottled water volume declined by 1.0 percent in 2008 and losses intensified in 2009. Furthermore, producers' revenues declined in both 2008 and 2009 as well. Bottled water wholesale dollar sales first exceeded \$6 billion in 2000. By 2007, they topped \$11.5 billion. Category sales declined to \$11.2 billion the following year and to less than \$10.6 billion in 2009.

STRAINED U.S. ECONOMY

While bottled water failed to realize growth in 2008 or 2009, its sluggishness reflected forces affecting the entire beverage marketplace and most likely did not indicate a

permanent diminishment in demand for bottled water. Straitened economy conditions affected all sectors of the industry. Energy and commodities costs presented ongoing challenges. Input costs for items including polyethylene terephthalate (PET), aluminum, and fuel contributed to higher prices for consumers, which, in turn, affected virtually all liquid refreshment beverage segments. In addition, some consumers began opting for smaller, more affordable package sizes. While people still are consuming the same overall amount of liquid, the impact of trading to smaller sizes such as going from the 20-ounce size to the 16-ounce—may be the reduction of product waste. Consumers may have become vigilant about not throwing away 4 ounces of the 20-ounce size.

DEMAND FOR BOTTLED WATER PERSISTS

Consumers have demonstrated a strong thirst for bottled water, which will persist in the future. Changes in average intake indicate potent interest in a product that consumers look to as a healthful alternative to other beverages. Americans upped their annual consumption by more than 11 gallons from 16.2 gallons per person in 1999 to 27.6 gallons 10 years later. During the same period, per capita consumption of CSDs dropped by more than nine gallons. Per capita consumption of other major beverage categories, like milk and fruit beverages, also declined. Other types, including coffee and tea, were characterized by stability (though the ready-todrink versions of both categories made gains). Thus, bottled water proved itself to be the key component of the liquid refreshment beverage market.

U.S. BOTTLED WATER MARKET					
Per Capita Consumption					
1999 – 2009					

Year	Gallons Per Capita	Annual % Change
1999	16.2	
2000	16.7	3.5%
2001	18.2	8.6%
2002	20.1	10.6%
2003	21.6	7.2%
2004	23.2	7.5%
2005	25.4	9.7%
2006	27.6	8.4%
2007	29.0	5.3%
2008	28.5	-1.8%
2009	27.6	-3.2%

Multiple factors contribute to U.S. consumers' enthusiasm for bottled water. These include health, safety, convenience, and value. Bottled water's versatility makes it suitable for consumption at any time of day and in virtually any situation. It doesn't need to be kept cold (like soft drinks or juice) or warm (like conventional coffee or tea). As far as ready-to-drink commercial beverages go, bottled water is relatively inexpensive and, with competitive (sometimes aggressive) pricing, it is becoming increasingly affordable for consumers. Various packaging types, ranging from bulk to single-serve, facilitate a variety of uses. Consumers' interest in foods and beverages that confer benefits above and beyond refreshment also contributes to the quintessential hydrating beverage's performance in recent years.

Amid concern about obesity and other health matters, bottled water's lack of calories and artificial ingredients attracts conscientious consumers. Even where tap water may be safely potable, many people prefer bottled water, which they regard as superior in taste. The convenient availability of packaged water wherever beverages are sold also crucially differentiates bottled water from tap.

Even though bottled water is frequently compared to tap water, bottled water actually achieved its market position by luring consumers away from other packaged beverages perceived as less healthy than bottled water. While some consumers may have turned away from regular, full-calorie sodas in favor of their diet versions, many others opted to imbibe bottled water instead.

CATEGORY DEVELOPMENTS

Domestic non-sparkling water remains the most substantial segment of the U.S. packaged water industry. Domestic non-sparkling water's 8.1 billion gallons represented 96.1 percent

of total volume in 2009. As a whole, domestic non-sparkling declined at a slower rate than the overall bottled water market.

The non-sparkling category includes diverse parts that had very different results. In 2009, all but one of its segments declined, though rates varied considerably. Throughout most of the 1990s and 2000s, the retail premium PET segment—consisting of still water in single-serve PET bottles—drove the overall category's development. Indeed, the PET component enlarged by a double-digit percentage rate 16 consecutive times through 2007. Growth slowed markedly in 2008 before it disappeared in 2009. Yet PET's 0.7 percent reduction was far less than the 2.5 percent loss measured for bottled water in general. Besides, PET volume in 2009 of almost 5.2 billion gallons stood more than 4.1 billion gallons higher than it had in 1999, and its share of total bottled water swelled from 24 percent to more than 61 percent during that 10-year period.

Retail bulk volume growth slowed as more and more consumers selected convenient PET multipacks in large format retail channels instead of larger (1 to 2.5 gallon) sizes. Its share eroded from nearly one-quarter of the category volume at the beginning of the century to less than 12 percent by 2009, largely as a result of competition from PET. Direct delivery also confronted intramural competition from handy, portable PET bottles. The segment, which comprised the largest of them all as recently as the mid-1990s, accounted for 14 percent of total volume by the end of the 2000s.

The relatively small, essentially regional vending segment involving refillable jug containers achieved growth late in the decade after several years of contraction. Its low cost during economic hard times undoubtedly explains vending's rebound.

The two segments outside the domestic non-sparkling category both saw declines in 2009. The imported water segment, the smallest of them all, is prone to fluctuations.

U.S. BOTTLED WATER MARKET Volume and Growth by Segment 2001 – 2009								
	Non-Sparkling		Domestic Sparkling		Imports		Total	
Year	Volume*	Change	Volume*	Change	Volume*	Change	Volume*	Change
2001	4,917.3	9>	144.0		123.9		5,185.3	
2002	5,487.5	11.6%	149.5	3.8%	158.7	28.0%	5,795.6	11.8%
2003	5,923.9	8.0%	152.6	2.1%	193.3	21.8%	6,269.8	8.2%
2004	6,411.3	8.2%	166.8	9.3%	228.6	18.2%	6,806.7	8.6%
2005	7,171.4	11.9%	185.0	10.9%	182.5	-20.2%	7,538.9	10.8%
2006	7,901.4	10.2%	189.3	2.3%	164.3	-10.0%	8,255.0	9.5%
2007	8,376.6	6.0%	200.1	5.7%	180.9	10.1%	8,757.6	6.1%
2008	8,302.9	-0.9%	204.7	2.3%	161.8	-10.6%	8,669.3	-1.0%
2009	8,123.8	-2.2%	202.2	-1.2%	127.9	-20.9%	8,454.0	-2.5%
* Millions of gallons Source: Beverage Marketing Corporation								

In the 2000s, it registered double-digit percentage growth in some years, and equally sizeable contractions in others. After an up year in 2007, imported water's volume fell sharply in 2008 and then plummeted precipitously in 2009. Sparkling dipped far more modestly.

As usual, domestic non-sparkling water accounted for almost all per capita bottled water consumption in 2009. Sparkling water and imports each represented less than one gallon per person. In the key PET portion, average intake moved from less than five gallons in 1999 to almost 17 gallons 10 years later.

INTERNATIONAL DEVELOPMENTS

Bottled water emerged as a major beverage industry force not only in the United States—by far the single-largest national market in terms of volume—but also in practically every major geographical region of the world. Bottled water first became a sizeable, mainstream commercial beverage category in Western Europe, where consumption of it has long been part of many residents' daily routine. It is now a truly global beverage, found even in some of the more remote corners of the globe. Certain Asian markets achieved strong growth to become major bottled water markets during the 2000s.

Global bottled water consumption is estimated to have exceeded 53.5 billion gallons in 2009, according to data from the latest volume of Beverage Marketing's *The Global Bottled Water Market*. The global rate of consumption rose by 2.7 percent in 2009. Per capita consumption of 7.9 gallons represented a gain of one-and-a-half gallons over the course of five years.

Of course, per capita consumption by individual region or country can diverge dramatically from the global average. For instance, several Western European countries have per capita consumption levels far above 25 gallons, and two markets exceeded 50 gallons per person in 2009. At the same time, however, much of the developing world, where the bulk of the world's population resides, finds its per capita consumption figures still in the single-digit range.

Although the global per capita consumption figure may obscure pronounced regional differences, bottled water's global growth indicates demand for it in diverse markets. Consumers have demonstrated a thirst for bottled water in highly developed markets, in less developed ones, and in economies in transition. Bottled water tapped into some divergent consumer trends around the globe. In developed countries such as the United States and Canada, bottled water has become an especially dynamic major commercial beverage category by registering as an attractive option for health-conscious consumers. Marketers positioned bottled water as a beneficent alternative to CSDs and juice drinks. Many in the developed world see bottled water as not only a way of

GLOBAL BOTTLED WATER MARKET Leading Countries' Consumption and Compound Annual Growth Rates 2004 – 2009

2009	1 29	Millions o	CAGR*	
Rank	Countries	2004	2009	2004/09
1	United States	6,806.7	8,454.0	4.4%
2	Mexico	4,668.3	6,887.1	8.1%
3	China	3,181.2	5,688.6	12.3%
4	Brazil	3,062.0	4,252.5	6.8%
5	Italy	2,814.4	2,947.2	0.9%
6	Indonesia	1,943.5	2,938.6	8.6%
7	Germany	2,722.6	2,840.7	0.9%
8	France	2,257.3	2,163.8	-0.8%
9	Thailand	1,310.0	1,742.1	5.9%
10	Spain	1,453.5	1,272.4	-2.6%
	Top 10 Subtotal	30,219.4	39,187.1	5.3%
	All Others	10,709.8	14,336.0	6.0%
	WORLD TOTAL	40,929.2	53,523.0	5.5%
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^{*} Compound annual growth rate

Source: Beverage Marketing Corporation

achieving hydration, but also as a functional beverage. At the same time, in the developing world, bottled water serves at least a partial solution to the problem of often-unsafe water found in many countries.

Much of the world's bottled water market is still highly fragmented and controlled by local brands, but consolidation is rapidly occurring, as four companies have come to dominate much of the market. Swiss food and beverage giant Nestlé and France's Danone are the traditional leaders of the bottled water pack. Both companies centered their operations around the core markets of Western Europe and the United States. However, as water growth is increasingly coming from the developing world, Nestlé and Danone have taken their battle to the new competitive fields of Asia, Latin America, and other areas. In fact, Danone stepped back from the U.S. market to focus on some of those other markets. Soft drink industry leaders Coca-Cola and PepsiCo also joined the global bottled water race. Following their strong showings in the United States, both companies increasingly devoted resources and energy to developing their global bottled water businesses.

Although Europe ranks as the leading regional consumer of bottled water, the largest national markets do not lie within the continent's borders. In terms of volume by individual countries, North America boasts the two largest markets, the United States and Mexico, which together accounted for close to 29 percent of the world's packaged water market in 2009. Although the U.S. bottled water market had been a catalyst

for much of the global expansion up until the mid-2000s, its compound annual growth rate (CAGR) of 4.4 percent for the five-year period ending with 2009 was noticeably slower then the 5.5 percent CAGR achieved by the growth of the global market during the same period.

Mexico alone accounted for 12.9 percent of the global volume with almost 6.9 billion gallons in 2009 and a market-beating CAGR of 8.1 percent. China became the third country that could claim a double-digit share of global volume with 5.7 billion gallons, or 10.6 percent of the total. Chinese bottled water volume has enjoyed double-digit percentage growth rates for several consecutive years, registering a 12.3 percent CAGR for the period from 2004 to 2009—by far the highest rate among the 10 biggest bottled water markets. Fourth-place Brazil and sixth-place Indonesia also registered CAGRs higher than the international market's.

Europe may not boast the biggest bottled water markets, but it does have several major ones, including four of the 10 largest. However, as these are firmly established, their growth tends to be slower than those where packaged water has a less entrenched tradition. Indeed, some of the most prominent countries experienced contraction or only very slight growth. For instance, in 2009, France's volume declined by 2.4 percent and Italy's dropped by 4.8 percent. During the five-year period ending that year, Italy, the fifth-largest bottled water market in the world, had a CAGR of just 0.9 percent, and eighth-place Germany moved at the same pace. France, the number-eight market, declined, as did Spain, the fourth-largest European market and the tenth-biggest in world. As a group, the four leading European bottled water markets accounted for slightly more than 17 percent of the world's total volume in 2009.

In the majority of countries throughout the globe, still water accounts for the majority of sales. Sparkling water sales are strong in a minority of countries, such as Argentina, Chile, Uruguay, the Netherlands, and Germany, where sparkling water is often tied to meal-consumption practices. On a global level, sparkling water accounts for an estimated 10 percent of the total volume, with still water accounting for the remaining 90 percent.

Plastic packaging is preferred over glass in almost every country, with the exception of Germany, where recycling laws make a determinative impact on packaging trends. However, even in Germany, and in other countries, such as the United Kingdom, where glass has a strong presence, PET is the most dynamic and rapidly growing segment. At about one-third of global volume, home and office delivery (HOD) —or bulk water—still accounts for a minority of global bottled water sales. Yet, it is a vital segment in many countries, such as Mexico, where it accounts for more than two-thirds of the volume. Interest from the major water players has grown recently as HOD water becomes increasingly branded. An intense context for HOD supremacy could occur in the near future.

Mexico leads the world in bottled water consumption.

Average intake in Mexico jumped from 44.5 gallons in 2004 to nearly 62 gallons five years later. The former leader in average intake, Italy, consumed the equivalent of 50.7 gallons per person in 2009.

Several Middle Eastern markets rank very highly in per capita bottled water consumption. With the equivalent of more than 40 gallons for each resident in 2009, the United Arab Emirates (UAE) had the third-highest level of bottled water consumption in the world. In addition to the UAE, the Middle East region has Lebanon and Saudi Arabia in the top 20 in per capita bottled water consumption. At 20 gallons per resident, Israel also consumes bottled water at a rate greater than the global average.

GLOBAL BOTTLED WATER MARKET Per Capita Consumption by Leading Countries 2004 – 2009					
2009		Gallons Per Capita			
Rank	Countries	2004	2009		
1	Mexico	44.5	61.9		
2	Italy	48.5	50.7		
3	United Arab Emirates	27.9	40.1		
4	Belgium-Luxembourg	39.1	36.7		
5	Germany	33.0	34.5		
6	France	37.4	33.8		
7	Lebanon	26.8	31.8		
8	Spain	36.1	31.4		
9	Hungary	20.1	29.3		
10	United States	23.2	27.6		
11	Slovenia	21.2	27.1		
12	Thailand	20.2	26.4		
13	Saudi Arabia	23.2	26.4		
14	Switzerland	26.3	26.0		
15	Croatia	18.1	25.6		
16	Qatar	20.6	25.5		
17	Cyprus	24.3	24.5		
18	Austria	21.7	23.5		
19	Czech Republic	23.0	23.3		
20	Hong Kong	15.4	21.9		
	GLOBAL AVERAGE 6.4 7.9				
Source: Beverage Marketing Corporation					

While Europe may no longer hold the top spot in volume per capita, 12 of the top 20 bottled water consumers on a per person basis are European countries. The consumers of the combined market of Belgium-Luxembourg imbibed almost 37 gallons each. France, Germany, Spain, and Italy were the only other countries with per capita consumption greater than 30 gallons. French consumers quaffed 3.6 gallons less bottled water in 2009 than they had five years earlier. In 2009,

Germany and Spain had per capita consumption rates of 34.5 and 31.4 gallons, respectively, putting them in fifth and eighth place in terms of average bottled water intake. Unlike France and Spain, Germany consumed more bottled water per person in 2009 than it had five years before. Hungary, which ranked ninth, increased its bottled water consumption greatly during the 2000s. While markets in the west hold the highest numbers, Eastern Europe can claim several spots among the top-20 in per capita bottled water consumption, although Bulgaria fell off the bottom of the list in 2009, when China's special administrative region of Hong Kong displaced it.

While Asian nations attained stature among the world's bottled water markets when measured in total volume, the populous countries generally do not have high per-person intake levels. Thailand stood among the top 20 in terms of per capita bottled water consumption with 26.4 gallons in 2009. Hong Kong made the list for the first time as its average intake approached 22 gallons. Despite its status as the third-largest market, mainland China had a per capita consumption figure of just 4.2 gallons, well below the global norm. However, Chinese consumption nearly doubled from 2004 to 2009.

Americans' per capita bottled water consumption puts the United States in the number 10 position among the countries of the world, between Hungary and Slovenia.

FUTURE GROWTH ANTICIPATED

Beverage Marketing fully anticipates bottled water to bounce back from the weakness felt at the end of the 2000s and again invigorate the U.S. multiple beverage marketplace in the near future. The total amount of liquid Americans annually consume will remain stable, resulting in overall volume growth in line with population increase, but bottled water is on track to grow considerably faster. As has become the norm, CSDs will continue to contract. Most other beverage categories—including coffee, fruit beverages, and tea—are likely to grow much more slowly than bottled water, which is poised to achieve still another high in per capita consumption in the years ahead.

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